P E R M I T T O O P E R A T E

Permit Number 44-23

EQUIPMENT OWNER-OPERATOR:

ConocoPhillips Company
Santa Maria Facility
2555 Willow Road
Arroyo Grande, California 93420

EQUIPMENT LOCATION:

2555 Willow Road
Arroyo Grande, California

FOR THE EQUIPMENT LISTED HEREIN AND SUBJECT TO THE LISTED CONDITIONS

April 11, 2003
ISSUANCE DATE

April 1, 2008
ANNIVERSARY

LARRY R. ALLEN
Air Pollution Control Officer

DAVID W. DIXON
Engineering Supervisor

Application Numbers: 3322, 3347, & 3380

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Conventions and Abbreviations

A. The following conventions are used in this permit.

1. The reference for each requirement will be noted in [square brackets]. References that are noted as being "District-only" are not federally-enforceable requirements. All conditions with references in [square brackets] that do not contain the phrase "District-only" must be considered federally-enforceable requirements.

2. In multi-part conditions, the general reference notation at the beginning of the condition will apply throughout, except for those subparts that are followed by a specific reference for which only the specific reference shall apply.

3. Unless otherwise noted, a "day" shall be considered a 24 hour period from midnight to midnight (*i.e.*, calendar day).

4. Unless otherwise noted, averaging periods are intended to mean the following.

   a. Daily average for hourly limit, record, or report: total for calendar day divided by twenty-four (24).
   b. Three (3) hour average for concentration: average concentration over a continuous three (3) hour period.
   c. 168 hour average for concentration: average concentration over a continuous 168 hour period.
   d. Quarterly average sulfur content: average of all sulfur content determinations made during the preceding three (3) month period (see additional note a.2 to condition section I.A).

5. The number of values displayed for any given emission or operational limit in this permit is intended to represent the number of significant figures to which test or analysis results are to be rounded. *e.g.*, 2,000 ppm is intended to represent 2.000E3 ppm and any test result greater than 2,000.5 ppm would not comply with that limit.

6. When rounding test and analysis results or recorded and reported values to the correct number of significant figures, any rounding of the value "five (5)" should result in an even number. *e.g.*, 34.65 to three significant figures would be written 34.6. Also when rounding, if the final digit is 0, 1, 2, 3, or 4, the number does not change and, if the final digit is 6, 7, 8, or 9, the number is increased by one.

7. Federal regulation subpart references will typically be indicated by their subpart designation only. The titles of all subparts included here are as follows.

   40CFR60 Subpart A, General Provisions (New Source Performance Standards - NSPS)
   40CFR60 Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
   40CFR60 Subpart J, Standards of Performance for Petroleum Refineries
   40CFR60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
   40CFR60 Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

40CFR60 Subpart GGG, Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries
40CFR60 Subpart QQQ, Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems
40CFR60, Appendix B, Performance Specification 2, Specifications and Test Procedures for SO_2 and NO_x Continuous Emission Monitoring Systems in Stationary Sources (abbreviated 40CFR60.PS-2)
40CFR60, Appendix B, PS-5, Specifications and Test Procedures for TRS Continuous Emission Monitoring Systems in Stationary Sources (abbreviated 40CFR60.PS-5)
40CFR60, Appendix B, PS-7, Specifications and Test Procedures for Hydrogen Sulfide Continuous Emission Monitoring Systems in Stationary Sources (abbreviated 40CFR60.PS-7)
40CFR61 Subpart A, General Provisions (National Emission Standards for Hazardous Air Pollutants - NESHAP)
40CFR61 Subpart M, National Emission Standard for Asbestos
40CFR61 Subpart FF, National Emission Standard for Benzene Waste Operations
40CFR63 Subpart A, General Provisions (NESHAP for Source Categories - MACT)
40CFR63 Subpart CC, National Emission Standard for Hazardous Air Pollutants from Petroleum Refineries
40CFR63 Subpart UUU, National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units
40CFR63 Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (non-Gasoline)
40CFR63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
40CFR64, Compliance Assurance Monitoring
40CFR82, Protection of Stratospheric Ozone
40CFR82 Subpart E, Labeling of Products Using Ozone-Depleting Substances
40CFR82 Subpart F, Recycling and Emission Reduction
40CFR82 Subpart G, Significant New Alternatives Policy Program

8. District Rule numbers only, will be used for the most part in this permit. The titles of all rules referenced are as follows.

SIP Rule 106, Standard Conditions
Rule 107, Breakdown or Upset Conditions and Emergency Variances
Rule 113, Continuous Emissions Monitoring
SIP Regulation IV, Rule 113, Particulate Matter (abbreviated SIP Rule IV.113)
SIP Rule 114, Gaseous Contaminants Prohibitions
Rule 201, Equipment Not Requiring a Permit
SIP Rule 201.E, Posting of Permit to Operate
Rule 204, Requirements (a.k.a. New Source Review)
SIP Rule 205, Conditional Approval
Rule 206, Conditional Approval
Rule 210, Periodic Inspection, Testing and Renewal of Permits to Operate
Rule 216, Federal Part 70 Permits
Rule 302, Schedule of Fees
SIP Rule 401, Visible Emissions
Rule 402, Nuisance
Rule 403, Particulate Matter Emission Standards

SIP Rule 404, Sulfur Compounds Emission Standards, Limitations, and Prohibitions
SIP Rule 406, Carbon Monoxide Emission Standards, and Limitations
SIP Rule 407, Organic Material Emission Standards, Limitations, and Prohibitions
Rule 407, Organic Material Emission Standards
Rule 411, Surface Coating of Metal Parts and Products
SIP Rule 416, Degreasing Operations
SIP Rule 419, Petroleum Pits, Ponds, Sumps, Well Cellars, and Wastewater Separators
SIP Rule 422, Refinery Process Turnarounds
SIP Rule 424, Gasoline Dispensing Facilities
Rule 425, Storage of Volatile Organic Compounds
Rule 430, Control of Oxides of Nitrogen from Industrial, Institutional, Commercial Boilers, Steam Generators, and Process Heaters
Rule 431, Stationary Internal Combustion Engines
SIP Rule 501, General Burning Provisions
Rule 433, Architectural Coatings

B. Abbreviations used in this permit are as follows.

40CFR	Chapter 40 to the Code of Federal Regulations
acfm	actual cubic feet per minute
ACM	asbestos containing material
APCO	Air Pollution Control Officer
ARB	Air Resources Board
atm	atmosphere
bbl	barrel (42 gallons)
BACT	Best Available Control Technology
CALOSHA	California Occupational Safety and Health Authority
CAM	Compliance Assurance Monitoring
CCR	California Code of Regulations
cf	cubic feet
CMS	continuous monitoring system
CO	carbon monoxide
DCS	Distributed Control System
District	San Luis Obispo County Air Pollution Control District
EPG	electrical power generation
^{o}F	degrees Fahrenheit
HAPs	hazardous air pollutant(s)
heat exch	heat exchanger
hp	horsepower
H_2O	water
H_2S	hydrogen sulfide
gph	gallons per hour
gpm	gallons per minute
GHV	gross heating value
g/hr	grams/hr
gr/dscf	grains per dry standard cubic foot
H&SC	California Health and Safety Code
KO	knock-out (catch point for liquids in a vapor line)
lb	pounds
lb/hr	pounds per hour
lb/mmBtu	pounds per million British thermal units of heat input

lb-stm/hr	pounds of steam per hour
MACT	Maximum Achievable Control Technology
ml/min	milliliter per minute
mmBtu	million British thermal units
mmscfd	million standard cubic feet per day
MVAC	motor vehicle air conditioner
MW	megawatt (electrical)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	oxides of nitrogen
NO_2	nitrogen dioxide
NSPS	New Source Performance Standards
O_2	oxygen
ODS	ozone-depleting substances
P&ID	piping and instrumentation diagram
PM10	particulate matter less than ten (10) microns
ppmv	parts per million by volume
ppmwv	parts per million by volume, wet
PR	photochemically reactive (solvent)
PRV	pressure relief valve
psia	pounds per square inch absolute
psig	pounds per square inch gauge
RACM	regulated asbestos-containing material
RGG	reduced gas generator
RMP	risk management plan
ROU	reverse osmosis unit
RVP	Reid vapor pressure
S	total sulfur
SIC	Standard Industrial Classification
SIP	State of California Implementation Plan
SO_x	oxides of sulfur
SO_2	sulfur dioxide
SSM	startup, shutdown, and malfunction
TABQ	total annual benzene quantity
tpy	tons per year
TEG	triethylene glycol
TRS	total reduced sulfur compounds
TVP	true vapor pressure
VOC	volatile organic compounds
wt%	percent by weight

I. Specific Emission and Operational Limits

A. Emission Limits. The following emission limits shall apply to the identified units:

Unit		Limit			Compl-iance	Notes
B-1,C,D-1	B-2A/B(2) B-62A/B(2) B-102A/B(2) B-504 B-506	1.	NO_x	0.036 lb/mmBtu or 30 ppmv @3% O_2 dry	annual test and oxygen monitor-ing	(d) [Rule 430 & 40CFR60.44b.a.1.i for B-506 and District-only, Rule 430 for all others]
		2.	CO	400 ppmv @3% O_2 dry	annual test	[District-only, Rule 430]
B-1,C	B-2A	3.	SO_2	0.090 lb/mmBtu 6.94 lb/hr	biennial stack test	[District-only, Rule 206]
	B-2B	4.	SO_2	0.091 lb/mmBtu 6.93 lb/hr	biennial stack test	[District-only, Rule 206]
	B-102A/B(2)	5.	SO_2	0.094 lb/mmBtu 7.6 lb/hr each	biennial stack test	[SIP Rule 205]
	B-201A/B(2)	6.	NO_x	0.090 lb/mmBtu 0.29 lb/hr each	annual test	[SIP Rule 205]
		7.	SO_2	0.094 lb/mmBtu 0.3 lb/hr each	biennial stack test	[SIP Rule 205]
D-2, co-generation boiler	B-505	8.	NO_x	30 ppmv @3% O_2 dry	annual test	[District-only, Rule 430]
		9.	SO_2	100 lb/day	quarterly calcula-tion	(a) [District-only, Rule 204]
		10.	CO	154 ppmv @3% O_2 dry	annual test	[District-only, Rule 206]
		11.	VOC	30 ppmv @3% O_2 dry	biennial test	[District-only, Rule 206]
H, gas oil rack		12.	VOC	2,300 ppmv	each use test	per load avg [District-only, Rule 206]

(continued)

A. Emission Limits. (continued)

Unit		Limit				Compliance	Notes
K, tail gas unit	B-702	13.	a.	SO_2	100 ppmv @0% O_2 dry	biennial test and AN-1707/ 1709 continuous monitor	[SIP Rule 205 and 40CFR60.104.a.2.i]
			b.		4.8 lb/hr		[SIP Rule 205]
		14.	a.	TRS	383.5 lb/week		(b) [SIP Rule 205]
			b.		65 ppmv @0% O_2 dry	annual test and AN-1707/ 1709 continuous monitor	168 hour average [SIP Rule 205]
			c.		300 ppmv @0% O_2 dry		instantaneous, (c) [40CFR60.104.a.2.ii]
		15.		H_2S	10 ppmv @0% O_2 dry		(c) [40CFR60.104.a.2.ii]
R-3, calciner cold stack		16.	a.	SO_2	2000 ppmwv @12% O_2 dry	annual test	Appendix A [Sip Rule 205 & 114.1.a]
			b.	PM	0.30 gr/scf		(f) [SIP Rule IV.113.1]
			c.		lb/hr based on process rate		(g) [SIP Rule IV.113.2]
R-2, cooler stack		17.	a.	PM	0.30 gr/scf		(f) [SIP Rule IV.113.1]
			b.		lb/hr based on process rate		(g) [SIP Rule IV.113.2]
S-2, railcar baghouse		18.	a.	PM	0.30 gr/scf	biennial test	(f) [SIP Rule IV.113.1]
			b.		lb/hr based on process rate		(g) [SIP Rule IV.113.2]
B-1, D-1, M	diesel engines	19.	a.	NO_x	600 ppmv @15% O_2 dry or 30 vol% reduction	periodic test	(e) [District-only, Rule 431.D.3]
			b.	CO	4500 ppmv @15% O_2 dry		
D-1	G-515-3 G-515-4	20.	a.	NOx	3274 g/hr ea.	manufacture specification	[District-only, Rule 206]
			b.	CO	935 g/hr each		
			c.	PM10	39 g/hr each		
			d.	VOC	113 g/hr each		
			e.	SOx	344 g/hr each		

Additional Notes

(a) 1) The SO_2 calculations shall be based on 100% oxidation of fuel gas sulfur in the fuel gas to SO_2. The sulfur content of the fuel gas shall be calculated by multiplying the daily amount of fuel gas burned by the quarterly average sulfur content of the fuel gas.

2) The quarterly average sulfur content of the fuel gas shall be calculated by summing all weekly Tutweiler measurements required under condition III.B.2.c.2 and dividing by the number of weekly readings.

3) The average daily oxides of sulfur (as SO_2) emissions shall be calculated at the end of each quarter.

(b) Total reduced sulfur compounds (TRS) shall be analyzed specifically as COS, CS_2, mercaptans as CH_3SH, and H_2S; and then summed and presented as total reduced sulfur compounds.

(c) Calculated as sulfur dioxide.

(d) The B-2A/B heaters and B-506 boiler are the only units with oxygen monitors.

(e) Applicable to the respective engines upon retrofit or replacement under condition III.C.11, excluding the ROU standby engine and the G-515-3 and G-515-4 emergency water pump engines.

(f) Intentional duplication of condition III.A.1.c.1.

(g) Intentional duplication of condition III.A.1.c.2.

B. Operational Limits. The following operational limits shall apply to the specified units. Compliance shall be determined through recordkeeping except as noted: [District-only, Rule 206]

Unit			Parameter	Limit		Notes
1.	refinery		crude oil throughput	a.	48,000 bbl/day	daily total, wet basis [District-only, Rule 206]
				b.	16,220,600 bbl/yr	12 month rolling period, wet basis [District-only, Rule 206]
2.	carbon plant		green coke feed	51,760 lb/hr		daily average [District-only, Rule 206]
3.	B-1,C	B-2A	fuel feed (e) and (f)	a.	77.0 mmBtuh	maximum hour [District-only, Rule 206]
		B-2B		b.	76.2 mmBtuh	maximum hour [District-only, Rule 206]
		B-2A/B (2)		c.	529,104 mmBtu each	12 month rolling period [District-only, Rule 204]
		B-62A		d.	16.2 mmBtuh	maximum hour [District-only, Rule 206]
		B-62B		e.	16.0 mmBtuh	maximum hour [District-only, Rule 206]
		B-62A/B (2)		f.	140,160 mmBtu each	12 month rolling period [District-only, Rule 204]
		B-102A/B (2)		g.	80.5 mmBtuh each	maximum hour [District-only, Rule 206]
				h.	705,180 mmBtu each	12 month rolling period [District-only, Rule 204]
		B-2A,62A, 102A (3)		i.	156.9 mmBtuh total	daily average [District-only, Rule 206]
		B-2B,62B, 102B (3)		j.	156.9 mmBtuh total	daily average [District-only, Rule 206]

(continued)

B. Operational Limits. (continued)

Unit			Parameter	Limit		Notes
4.	B-1, cooling tower		organic compounds in water	15 mg/l		per sample, weekly test [District-only, Rule 206]
5.	refinery		fuel gas	a.	0.10 gr/dscf H_2S (160 ppmv)	AN-603 continuous monitor, 3 hour average [40CFR60.104.a.1 and 40CFR40b.c for B-506]
				b.	0.50 gr/dscf total S (797 ppmv)	weekly fuel test & annual analytical test, intentional duplication of condition III.A.1.d.2 [SIP Rule 404.e.1]
6.	refinery and carbon plant	B-504,6 & waste heat boiler	total steam produced	170,000 lb/hr		daily average [SIP Rule 205]
7.	D-1 boiler plant	B-504, B-506	total steam produced	a.	80,000 lb/hr	(a) and (b), daily and annual averages [SIP Rule 205]
		ROU standby engine	non-emergency operation	b.	52 hrs/yr	calendar year [District-only, Rule 206]
		G-515-3 G-515-4	non-emergency operation	c.	100 hrs/yr/unit	calendar year, (g) [District-only, Rule 206]
8.	D-2, co-generation boiler	B-505	fuel feed	a.	100 mmBtuh	(f), daily average [District-only, Rule 204]
				b.	821,250 mmBtu/yr	(c), yearly total [District-only, Rule 204]
9.	H, gas oil loading rack		truck loading throughput	a.	2,000 bbl/day	[SIP Rule 205]
			pumping rate	b.	500 gpm	[District-only, Rule 206]
			material received	c.	1.0 psia	RVP [District-only, Rule 206]
	H, gas oil loading rack	TK-802	material stored	d.	0.45 psia	RVP [District-only, Rule 206]
				e.	150°F	[SIP Rule 205]
10.	R-1, calciner preheater		triethylene glycol (TEG)	226 gal/yr		recharged, rolling 12 month basis [District-only, Rule 204]
11.	R-2, calciner multiclone		pressure drop	≤5.0 in H_2O		local gauge, instantaneous [40CFR64.6.c.2]

(continued)

B. Operational Limits. (continued)

Unit		Parameter	Limit		Notes
12.	R-3, cold stack baghouse	individual module pressure drop	a.	$\leq$6 in H_2O	local gauge, instantaneous [District-only, Rule 206]
		total pressure drop	b.	$\leq$9 in H_2O	control room gauge, instantaneous [District-only, Rule 206]
13.	U, sulfur pelletizing plant	pelletizer throughput	a.	42.6 tons/hr	[District-only, Rule 206]
		screen throughput	b.	50 tons/hr	[District-only, Rule 206]
		open stockpile storage	c.	25,000 tons	(d) [District-only, Rule 206]
14.	AN-603 H2S CMS	calibration drift	a.	<15 ppm	(i) [40CFR60.PS-7.6.2]
		relative accuracy	b.	(h)	[40CFR60.PS-7.6.3]
15.	AN-1707/1709 TRS CMS	calibration drift	a.	<17.5 ppm	(i) [40CFR60.PS-5.13.1]
		relative accuracy	b.	(h)	[40CFR60.PS-5.13.2]

Additional Notes

(a) Daily average is over a 24-hour period when receiving steam at a rate of 80,000 lb/hr. When receiving steam at a lower rate, boiler steam production from entire boiler plant can be increased to achieve a total steam load not to exceed the limit of 170,000 lb/hr of condition I.B.6.

(b) Annual averaged is over one (1) calendar year. The 80,000 lb/hr annual average shall not apply to periods when the carbon plant waste heat boiler is not operating. Specifically, the annual average equals {the sum of the 24 hour averages of refinery steam production for all calendar days of any given year that the carbon plant waste heat boiler produced steam which was then used at the refinery} divided by {the number of calendar days in any given year that the carbon plant produced steam which was then used at the refinery}.

(c) Calendar year basis. The actual fuel usage shall be the summation of each calendar month's total fuel flow rate times the respective month's average fuel gas gross heating value (GHV) used for compliance under condition III.D.7.b below.

(d) Prior approval for additional storage may be obtained from the APCO.

(e) Rolling 12-month basis. The actual fuel usage shall be the summation of the preceding 12-month's total fuel flow rate times the respective month's average fuel gas GHV used for compliance under condition III.D.7.b below.

(f) Daily average basis. The actual fuel usage shall be the summation of the day's total fuel flow divided by twenty-four (24) times the respective month's average fuel gas GHV used for compliance under condition III.D.7.b below.

(g) An emergency is defined as any time a refinery-declared state of emergency exists.

(h) If the average emissions during testing are less than 50% of the emission standard, the applicable emission standard value shall be used in the denominator of the Relative Accuracy (RA) equation 2-6 from 40CFR60.PS-2, as it appeared in the federal regulations as published on July 1, 2001, and the RA shall be no greater than 10%. If the average emissions during testing are greater than or equal to 50% of the emission standard, the average reference method value shall be used in the denominator of the equation and the RA shall be no greater than 20%. [40CFR60.PS-2.13.2]

(i) Maximum drift or deviation on six (6) of seven (7) test days.

II. Facility Description

A. General. This facility is a combined petroleum refinery and petroleum coke calciner, each of the two having the same major Standard Industrial Classification (SIC) Code of 29 (the refinery's specific code is 2911 and the carbon plant's is 2999). Raw petroleum enters the refinery by pipeline. Products leave as semi-refined petroleum by pipeline or tanker truck, as calcined or uncalcined solid petroleum coke by rail or haul truck, and as recovered sulfur by haul truck. The primary processes involve: raw material storage, atmospheric pressure distillation, vacuum distillation, delayed coking of residual solids, coke impurity removal through calcining, product storage, and product shipping. Secondary processes include: a refinery fuel gas system, a relief flare system, steam production, sulfur recovery, and oily water treatment. Three extraordinary aspects of the operation are worthy of specific note: the coke calciner heat recovery and particulate emission control system, petroleum storage tanks utilizing domed roofs and vapor recovery, and a six-megawatt cogeneration system.

The calciner heat recovery system was installed in the late 1970's when the calciner's "hot stack" was found to emit excessive particulate matter. A large baghouse was needed to control those emissions, so an upstream waste heat boiler was added to reduce the flue gas temperature and, thus, the cost of the construction and operation of that baghouse. The resulting exhaust gas is now discharged through the "cold stack." Steam produced by the waste heat boiler is used in the crude oil refining process, which reduces the amount of fuel combustion at the utility plant to produce steam. Overall lower combustion emissions have resulted from the use of this heat recovery system.

Domed roofs with a vapor recovery system were added to several large storage tanks in the early 1990's because of their significant odor potential. This effort was one of many in response to a conditional order of abatement brought by the District's Hearing Board. As the fluid level in a dome covered tank drops, purchased natural gas is bled into the head space to maintain a positive pressure. As the fluid level rises, that blanket gas, which may now contain odorous compounds, is vented to the refinery's make-gas system where the hydrogen sulfide absorption units remove odorous compounds such as elemental sulfur.

The cogeneration system is used to generate electricity from excess fuel gas that is not needed elsewhere in the refinery. With the shutdown of the Guadalupe oil field, where fuel gas was burned to produce enhanced oil recovery steam, and the Battles gas plant, where fuel gas was converted to pipeline quality natural gas, the refinery found itself in the mid-1990's with much more fuel gas than was necessary for crude oil processing. The cogeneration unit was their solution and consists of the B-505 boiler, which burns the excess gas to produce high quality steam, and a 5.8 megawatt steam turbine. The B-505 boiler emissions were new to the refinery and triggered the need for offsets under the District's New Source Review program. Emission reductions from the Battles gas plant shutdown in nearby Santa Maria were used to satisfy that need. Thus, this project provided the refinery with a more reliable source of electricity without creating an emission increase in the region.

Concerning regulatory programs, the Santa Maria Facility is a major federal stationary source for both criteria and hazardous air pollutants (HAPs). It is subject to several New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAPs), and maximum achievable control technology (MACT) standards. Continuous monitoring systems (CMS) keep watch over both the refinery fuel gas system and the sulfur plant system. Compliance Assurance Monitoring (CAM) has also been implemented for two discharge stacks in the coke calcining system.

B. Specific Equipment. The equipment descriptions in this section are organized by process. Major emission units are listed but all associated valves, flanges, piping, and minor emission units, which are not explicitly identified, are also included in this permit and subject to their respective major emission unit's requirements. ConocoPhillips is authorized to operate the equipment listed below in the configuration described. [SIP Rule 201]

1. Process Unit A-1, Petroleum Tank Farm; consisting of:

TITLE		ID	CAPACITY	DESCRIPTION
a.	gas oil (2)	TK-800,801	76,500 bbl each	welded shell, external floating pontoon roof, single shoe seal, 345.6 foot circumference [District-only, Rule 206]
b.	crude oil (3)	TK-900,901	92,000 bbl each	welded shell, external floating pontoon roof, primary shoe and zero-gap secondary wiper seals, 421 foot circumference [District-only, Rule 425.E.1]
		TK-903	92,000 bbl	welded shell, external floating pontoon roof, primary shoe and zero-gap secondary wiper seals, 421 foot circumference [Rule 425.E.1 & 40CFR60-Kb]
c.	recovered oil (2)	TK-100,101	9,460 bbl each	welded shell, dome roof, vented to Process A-2 [District-only, Rule 425.E.3]
d.	pressure distillate (2)	TK-550,551	52,000 bbl each	welded shell, dome roof, vented to Process A-2 [Rule 425.E.3 & SIP Rule 407.A.2]

2. Process Unit A-2, Tank Farm Vapor Recovery System; controlling vapors from Tanks 100, 101, 351, 550, and 551, water treatment system vessels F-821A/B/C, F-824, and F-408/9, and product pumps G-50-1/2; consisting of:

TITLE		ID	CAPACITY	DESCRIPTION
a.	blower suction knock-out drum	F-455		24" D x 5' T
b.	blower suction drip pot	F-456		13" D x 36' T
c.	vapor recovery blower (2)	GB-451	582 acfm	40 hp
d.	blower recycle cooler(2)	E-450		
e.	Tank 351 drip pot	F-353		16" D x 22" T

3. Process Unit B-1, Coking Unit A; consisting of:

TITLE		ID	CAPACITY	DESCRIPTION
a.	crude fractionating heater	B-2A	65.0 mmBtuh	eight (8) John Zink InfurNOx PSMR-16RM burners with automatic oxygen feedback control
b.	vacuum distillation heater	B-62A	17.2 mmBtuh	three (3) John Zink InfurNOx PSMR-15RM burners
c.	coking heater	B-102A	88.6 mmBtuh	twenty-four (24) John Zink InfurNOx PSMR-13RM burners
d.	coke drums (2)	D-101A, D-102A		
e.	coker fractionator	D-103A		
f.	gas recovery compressor	G-212A	1400 hp	turbine driven compressor with steam supplied by B-201A
g.	gas recovery steam superheater	B-201A	3.2 mmBtuh	
h.	cooling tower			serving Processes B-1 and C
i.	cooling tower spare circ pump	G-51-4	300 hp	Cummins, diesel fueled

4. Process Unit B-2, Coker Steamout System; consisting of:

TITLE		ID	CAPACITY	DESCRIPTION
a.	steamout quench tower	F-411		12' & 9' D x 35' T
b.	steamout condensate drum	F-415		6’6” D x 18’ T
c.	steamout overhead condenser	E-411	62.4 mmBtuh	heat exch, no atm vent
d.	steamout accumulator	F-412		7' D x 35' T
e.	quench tower circulating pump (2)	G-411	220 gpm each	
f.	heavy recovered oil pump (2)	G-412	40 gpm each	
g.	light recovered oil pump (2)	G-413	330 gpm each	
h.	steamout water pump (2)	G-414	147 gpm each	
i.	coke strainer (2)	F-413		12" D x 28" T
j.	open top, coke cooling water storage tanks (2)	TK-405,6	20,000 bbl each	71' D, manually positioned oil skimmers

5. Process Unit B-3, Gland Oil System; consisting of:

TITLE		ID	CAPACITY	DESCRIPTION
a.	gland oil tank	F-115	500 bbl	vented to F-117
b.	gland oil pump (2)	G-112	90 gpm each	
c.	gland oil filters (2)	F-116		12"D x 2'T each
d.	carbon canister (2)	F-117	400 lb carbon each	

6. Process Unit C, Coking Unit B; consisting of:

TITLE		ID	CAP.	DESCRIPTION
a.	crude fractionating heater	B-2B	65.0 mmBtuh	eight (8) John Zink InfurNOx PSMR-16RM burners with automatic oxygen feedback control
b.	vacuum distillation heater	B-62B	17.2 mmBtuh	three (3) John Zink InfurNOx PSMR-15RM burners
c.	coking heater	B-102B	88.6 mmBtuh	twenty-four (24) John Zink InfurNOx PSMR-13RM burners
d.	coke drums (2)	D-101B, D-102B		
e.	coker fractionator	D-103B		
f.	gas recovery compressor	G-212B	1400 hp	turbine driven compressor with steam supplied by B-201B
g.	gas recovery steam superheater	B-201B	3.2 mmBtuh	
h.	coke transfer conveyor system			bridge crane, hopper (2), and convey-or (2) serving Processes B-1 and C

7. Process Unit D-1, Main Boiler Plant; consisting of:

TITLE		ID	CAPACITY	DESCRIPTION
a.	steam boiler	B-504	125 mmBtuh	Nebraska, 100,000 lb-stm/hr, burner: low-nox North American 4211-140-LE, fuel gas only
b.	steam boiler	B-506	127 mmBtuh	B&W model FM103-97, burner: low-nox North American 4211-116-LE, fuel gas only
c.	emergency water pump engines (2)	G-515-3 G-515-4	370 hp each	Caterpillar model 3406B DIT LTS, diesel fueled

8. Process Unit D-2, Electrical Power Generation (EPG) Plant; with steam supplied to the EPG turbine and to refinery utilities; consisting of:

TITLE		ID	CAPACITY	DESCRIPTION
a.	fuel gas storage (2)		4,000 cf (each) @ 150 psig	pressure vessels
b.	boiler	B-505	70,000 lb-stm/hr & 100 mmBtuh	Babcock and Wilcox with Coen CFP/LN-32 burner, flue gas recirculation, and automatic oxygen feedback control
c.	steam driven turbine	N-970	7935 hp @ 66,000 lb-stm/hr	
d.	electrical generator	GT-970	5.8 MW	

9. Process Unit E-1, Sulfur Recovery Units A and B; each of a three (3) stage Claus design with 91 long-ton per day capacity and, except as noted, each consisting of:

TITLE		ID	CAPACITY	DESCRIPTION
a.	acid gas knock-out drum	F-612		3’ D x 10’6” T
b.	acid gas preheater	E-600	0.211 mmBtuh	no vent to atmosphere
c.	process water stripper overhead knock-out drum	F-355		3’ D x 8’ T
d.	reaction furnace & waste heat boiler	B-600	16.1 mmBtuh	Comprimo burner, no vent to atmosphere
e.	process water stripper knock-out drum cond pump (2)	G-358	30 gpm each	
f.	sulfinol acid gas knock-out drum pump	G-618	30 gpm	
g.	converters (2)	D-603/5		
h.	in-line heaters	B-605		no vent to atmosphere
i.	waste heat condenser	E-611		
j.	air blower (3)	GB-611		driven by: two each steam turbine and one electric
k.	sulfur condensers (4)	E-605/8 & E-610/12		
l.	air demand analyzer (2 total)	AA-601 & AB-601		no vent to atmosphere
m.	sulfur recovery unit incinerator (2 total)	B-602A/B		
n.	sulfur pit (2 total)			vented to B-602A/B

10. Process Unit E-2, Sulfur Recovery Support Units (common to Sulfur Recovery Units A and B); consisting of:

TITLE		ID	CAPACITY	DESCRIPTION
a.	sulfur plant relief drum	F-617		3’6” D x 7’ T
b.	relief drum pump (2)	G-617	15 gpm each	
c.	spare turbine	GB-611		

11. Process Unit G, Oily Water Treatment; consisting of:

TITLE		ID	CAPACITY	DESCRIPTION
a.	oily water sewer system			refinery-wide
b.	covered diversion box	F-820		10' H x 10' W x 10' D, atm vent
c.	covered API oil-water separator (3)	F-821A, B,C	535 gpm each	85' L x 12' W x 8' H, natural gas blanket vented to Process A-2
d.	recovered oil surge drum	F-824	110 bbl	fixed roof, natural gas blanket vented to Process A-2
e.	recycled solids tank (2)	F-408,9	120 bbl each	fixed roof, natural gas blanket vented to Process A-2
f.	safety surge tank (2)	TK-822,3	40,000 bbl	floating roof, 120' diameter, 377' circumference, mechanical shoe primary, rim-mounted secondary, and under-roof oil skimmer
g.	effluent air cooler	E-801	7.1 mmBtuh heat removal	fin-fan heat exchanger

12. Process Unit H, Gas Oil Loading Rack; consisting of:

TITLE		ID	CAPACITY	DESCRIPTION
a.	gas oil tank	TK-802	440 bbl	fixed roof, 12' D x 23'9" T, insulated
b.	loading & unloading rack			submerged top-load or bottom-load
c.	loading pump		40 hp	

13. Process Unit I, Hydrogen Sulfide Absorption Unit A; consisting of:

TITLE		ID	DESCRIPTION
a.	sulfinol H_2S absorber	D-601	3'7" D x 61' T
b.	sulfinol stripper	D-602	5' D x 62' T
c.	rich amine flash drum	F-600	7' D x 26' L
d.	hydrogen sulfide scrubber	F-616	18" D 13' T
e.	sulfinol storage and handling system		
f.	carbon filtration system		

14. Process Unit J, Hydrogen Sulfide Absorption Unit B; consisting of:

TITLE		ID	DESCRIPTION
a.	sulfinol H_2S absorber	D-601	
b.	sulfinol stripper	D-602	
c.	fuel gas H_2S analyzer	AN-603	Del Mar Sulfur Smart model 3200, span is 300 ppm H_2S, monitors output of both Units I & J
d.	rich amine flash drum	F-600	7' D x 26' L
e.	hydrogen sulfide scrubber	F-616	18" D 13' T
f.	sulfinol storage and handling system		
g.	carbon filtration system		

15. Process Unit K, Tail Gas Treating Unit; utilizing a vanadium-based liquid solution and consisting of:

TITLE		ID	DESCRIPTION
a.	reduced gas generator	B-701	
b.	hydrogenation reactor	D-701	
c.	contact condenser/desuperheater	D-702	
d.	absorber/reaction tank	F-704	
e.	tail gas combustor	B-702	discharge to atmosphere
f.	three-stage oxidizer system	F-701/2/3	Claus reaction
g.	tail gas emissions monitor	AN-1707/1709	span is 20 ppm H_2S & 350 ppm TRS
h.	sulfur melt pit	F-716	
i.	sulfur froth handling system		
1)	froth tank	F-712	25' D x 18 ' T
2)	Verti-press filter	ME-701	with bagging system

16. Process Unit L, Product Pump System; consisting of:

TITLE	ID	DESCRIPTION
electrically driven pump (2)	G-50	tandem barrier-fluid seals vented to Process A-2

17. Process Unit M, Compressor Engine; consisting of:

TITLE	ID	DESCRIPTION
spare plant-air compressor engine	GB-524-S	diesel fired, Caterpillar model 3306

18. Process Unit N, Portable Abrasive Blasting Equipment; consisting of:

TITLE		CAPACITY	DESCRIPTION
a.	sandpot	250 lb	portable, Kelco
b.	sandpot	500 lb	portable, Kelco, model 124
c.	blast guns		Kelco, model 24-36-W with nozzle numbers 5 through 10
d.	compressor	70 hp	Joy model D-185-S
e.	compressor	112 hp	Ingersol Rand P375WD
f.	compressor	49 hp	Ingersol Rand R-185
g.	blasting containment structure		24' x 20' x 15'

19. Process Unit O, Hydrocarbon Relief and Recovery System; consisting of:

Title		ID	CAPACITY	DESCRIPTION
a.	relief drum	F-451		8' D x 32' L
b.	quench tower	D-451		11' D x 28'6" T
c.	blower suction knock-out drum	F-452		24" D x 5' T
d.	blower suction drip pot	F-453		12" D x 36" T
e.	vapor recovery blower	GB-455	833 mmscfd	40 hp
f.	blower recycle cooler	E-452	47.4 mBtuh	heat exch, no atm vent
g.	blower discharge cooler	E-458	0.45 mmBtuh	heat exch, no atm vent
h.	blower discharge knock-out drum	F-458		30" D x 6' T
i.	discharge knock-out drum pump	G-458	10 gpm	
j.	light recovered oil pump (2)	G-454	100 gpm each	
k.	flare stack and seal drum	C-451		24" D x 200' H, steam-assisted
l.	flare gas flowmeter			Panametric, model 7168, ultrasonic
m.	flare stack sampling system to determine flared gas heat content		auto sample after 5 minutes of flared gas flow	Welker Engineering, downstream of D-451 quench tower
n.	heavy recovered oil pump (2)	G-453	250 gpm each	
o.	quench tower bottoms pump (2)	G-452	250 gpm each	
p.	recovered oil cooler	E-451	30 mmBtuh	heat exch, no atm vent

20. Process Unit P, Process Water System; consisting of:

Title		ID	CAPACITY	DESCRIPTION
a.	process water stripper	D-351		5' D x 93' T
b.	process water tank	TK-351	40,000 bbl	domed roof, vent to Process A-2
c.	feed/effluent exchanger	E-351	12.0 mmBtuh	heat exch, no atm vent
d.	stripper reboiler	E-353	24.7 mmBtuh	heat exch, no atm vent
e.	stripper overhead condenser	E-352	17.6 mmBtuh	heat exch, no atm vent
f.	stripper water cooler	E-354	5.4 mmBtuh	heat exch, no atm vent
g.	feed pump (2)	G-351	265 gpm each	
h.	stripper water pump (2)	G-352	280 gpm each	
i.	stripper reflux pump (2)	G-353	50 gpm each	
j.	skim oil pump	G-354	20 gpm	
k.	tank block sump pump (2)	G-357	20 gpm each	
l.	stripper feed filters	F-352		18" D x 3' T
m.	caustic storage tank	F-354		10' D x 17' H
n.	caustic circulation pump	G-356	5 gpm	
o.	caustic injection pump	G-355	30 gph	

21. Process Unit Q, Green Coke Handling System; consisting of:

TITLE		CAPACITY	DESCRIPTION
a.	sizing screen		three deck, 6' x 16', FMC model CA-3616
b.	conveyors (4)		
c.	stock-piles	five (5) grades	green coke receipts, plus 1/4" kilnfeed, 1/4" x 1", 1/4" x 6 mesh, & minus 6 mesh (fines)
d.	asphalt emulsion system		
1)	tank	13,500 gal	heated with boiler blowdown water
2)	water heater	250 gal	natural gas fired
3)	spray truck	1,175 gal	with spray bar
4)	portable tank	330 gal	with spray
5)	electric pump		for filling truck

22. Process Unit R-1, Petroleum Coke Calciner; consisting of:

TITLE		ID	CAP.	DESCRIPTION
a.	coke preheater			
1)	feed conveyor		100 tph	2' W x 400' L, with Ohmart weigh scale
2)	preheater chamber			20' W x 30' L x 30' H
3)	circulating fans		25,000 acfm	alternating between fans
4)	temperature control			
i.	triethylene glycol (TEG) tank		4,500 gal	pressure vessel
(a)	nitrogen blanket		2 psig	
(b)	pressure relief valve		3 psig	discharge to carbon filter
(c)	emergency relief valve		6 psig	discharge to atmosphere
ii.	circulating pumps (2)		140 gpm	Gould model 3196 ST
iii.	shell and tube heat exchanger			heat exch, no atm vent
iv.	electric heater		0.8 mmBtuh	no atm vent
v.	heater relief valve		150 psig	discharge to TEG tank
vi.	return line relief valve		1 psig	discharge to TEG tank
b.	refractory lined rotary kiln		13 mmBtuh	9' ID x 160' L, Kennedy Van Saun
c.	rotary product cooler			
d.	kiln gas exit train			
1)	refractory lined afterburner			9' ID x 30' L
2)	settling chamber			15' W x 20' L x 20' H
3)	refractory lined pyroscrubber			20' W x 68' L x 35' H
i.	burner (3)		60 mmBtuh each	refinery fuel gas fired, vent to waste heat boiler
ii.	combustion air blower		42,000 scfm	
4)	refractory lined hot stack			14' ID x 128' T, four stack cap leaves

(continued)

22. Process Unit R-1, Petroleum Coke Calciner: (continued)

TITLE		ID	CAPACITY	DESCRIPTION
e.	coke reclaim			
1)	hopper	4041	12.5 ton	17' L x 7' W x 9' H
2)	hopper conveyor	4042		21" W x 33' L
3)	cooler feed conveyor	4121		18" W x 43' L, vent to kiln burner fan

23. Process Unit R-2, Coke Calcining Kiln, Cold-Side Control System; consisting of:

TITLE		ID	DESCRIPTION
a.	multiclone	4056	Zurn model MTSA-24-9CYT-STD and, effective September 1, 2003, differential pressure indicator
b.	wet scrubber		Western Precipitator, Type D-B, size 32, Turbulaire Gas Scrubber

24. Process Unit R-3, Coke Calcining Kiln, Hot-Side Control System; consisting of:

TITLE		CAPACITY	DESCRIPTION
a.	waste heat boiler	100,000 lb-stm/hr @600 psig, 515EF	Zurn Industries
b.	magnesium hydroxide addition system		injection point at pyroscrubber exit bustle
c.	baghouse		six modules, 13' x 14' 28' H each, 168 eight inch dia. x 286" L fiberglass bags each
1)	heater	12 mmBtuh	fuel gas fired
2)	induced draft fan	122,000 cfm	electrically driven
3)	increased particulate matter detector		effective September 1, 2003, and located between baghouse and ID fan
d.	cold stack		5.25' dia. x 110' H
e.	baghouse fines system		vent to main baghouse inlet
1)	cyclone		catch discharged to enclosed bin
2)	baghouse		2.5' dia. x 5' H
3)	cartridge		
4)	vacuum blower	565 cfm	
5)	fines bin		enclosed

25. Process Unit S-1, Calcined Coke Storage and Handling; consisting of:

TITLE		CAPACITY	DESCRIPTION
a.	enclosed bucket elevator		12" W x 95' H
b.	bypass bin		20' H x 15' dia
c.	covered cross conveyor		18" W x 103' L
d.	triple deck screen		4' W x 12' L, Simplicity model M-120A
e.	single deck screen		60" dia., Sweco
f.	storage silo	1,270 ton total	four compartment

(continued)

25. Process Unit S-1, Calcined Coke Storage and Handling: (continued)

TITLE		CAP.	DESCRIPTION
g.	oversized product storage bin		9' W x 9' L x 15' H
h.	steel reclaim hopper		8' W x 16' L x 5' T, discharge to load-out conveyor
i.	covered load-out conveyor		24" W x 231' L
j.	loading chute and shroud		

26. Process Unit S-2, Calcined Coke Loading Control System; consisting of:

TITLE	CAPACITY	DESCRIPTION
baghouse	12,200 cfm, 15 hp	Western Precipitation Pulsflo model PF 4595-216, 2315 sq.ft. bag surface area

27. Process Unit S-3, Calcined Coke Portable Handling Equipment; consisting of:

Title		ID	CAPACITY	DESCRIPTION
a.	hopper (2)	4005,6	10 ton each	used for stockpiling, blending, or feeding calcined or green coke or elemental sulfur as needed
b.	stacker conveyor (2)	4137,8		used for stockpiling, blending, or feeding calcined or green coke or elemental sulfur as needed
c.	semi-portable hopper and conveyor	4004	10 ton	hopper: 16' L x 9' W x 12' H, conveyor: 24" W x 19' L, used for green coke blending and emergency green coke feed upon failure of normal vibratory feeder

28. Process Unit U, Sulfur Pelletizing Plant; consisting of:

TITLE		ID	CAP.	DESCRIPTION
a.	sulfur pump	6000	10 hp	
b.	pelletizing nozzle	6007		
c.	inclined bagging conveyor	6017	1.5 hp	
d.	bagger	6025		
e.	hopper with delumper	6026		
f.	conveyor	6027		between e and g
g.	conveyor	6028		between f and h
h.	rod deck screen	6030	7.5 hp	4' x 8', Symon
i.	screen delumper			
j.	screened product silo			
k.	portable bagger conveyor and hopper		3 hp	
l.	sulfur storage pit			16' W x 16' L x 13.5' D, below grade

29. Process Unit V, Product Elevator Bypass System; equipment ID 4090, consisting of:

TITLE		DESCRIPTION
a.	elevator bypass flop gate	
b.	uncovered conveyor	48' L
c.	spray hoop	

C. Insignificant Equipment. The following equipment and equipment types are considered environmentally insignificant. This equipment is not subject to the provisions of this permit except for those units that are subject to a federally-enforceable, generally applicable requirement as listed in section III.A.1.

Description		Basis for Insignificance
chemical laboratory analytical equipment		Rule 201.A.1
internal combustion engines rated <50 bhp		Rule 201.B.1
restroom water heaters		Rule 201.B.2
emergency standby generators		Rule 201.B.3
coke handling mobile equipment		Rule 201.C.1
diesel storage tanks used for vehicle fueling		Rule 201.I.4
gasoline storage tanks used for vehicle fueling		Rule 201.I.9
architectural coating spray guns		Rule 201.J.1
cold solvent cleaners		Rule 201.J.2
comfort air conditioning		Rule 201.M.1
comfort space heating		Rule 201.M.5
welding equipment		Rule 201.N.2
bead blaster		Rule 201.A.1
dedusting system		Rule 201.A.1
a.	two (2) 2 gpm dedust oil pumps	
b.	two (2) screw conveyors	
c.	oil spray nozzles	
d.	one (1) steam-heated 10,000 gal. oil storage vessel	
tail gas unit regenerative crystallizer system		Rule 201.A.1

III. CONDITIONS

A. STANDARD CONDITIONS

1. Generally Applicable Requirements. For the purposes of this permit, all requirements shall be based on standard atmospheric conditions of sixty degrees Fahrenheit (60^{o}F) and 14.7 psia. [SIP Rule 106]

a. Visible emissions shall not exceed Ringlemann #2 or forty percent (40%) opacity for a period exceeding three (3) minutes aggregated in any sixty (60) minute period of time. [H&SC 41701 and SIP Rule 401]

1) This condition shall not apply to open outdoor fires, which have been approved by the APCO, for the purposes of employee instruction in fire fighting methods. [SIP Rule 401.B.3]

b. If the APCO determines that the operation of this equipment is causing a public nuisance, ConocoPhillips shall take immediate action and eliminate the nuisance. [District-only, Rule 402]

c. Particulate matter emissions shall not exceed any of the following:

1) 0.30 gr/scf, on an hourly basis, for all emission units except combustion devices; [SIP Rule IV.113.1]

2) that lb/hr amount identified in Table I of SIP Rule 113 depending on process rate; [SIP Rule IV.113.2]

3) 0.30 gr/scf corrected to three percent (3%) O_2, wet, for combustion device emission units; or [SIP Rule IV.113.4]

4) 0.30 gr/dscf corrected to twelve percent (12%) CO_2 for combustion device emission units. [District-only, Rule 403.C.1]

d. Sulfur compound limitations.

1) Sulfur compound emissions shall not exceed 0.20 percent by volume of sulfur compounds calculated as sulfur dioxide, excluding units B-602A/B, which are exempt under SIP Rule 114.1.c, and excluding the calciner cold stack, which is subject to condition I.A.16.a. [SIP Rule 114.1.a]

2) Gaseous fuel sulfur content shall not exceed 50 gr/100 dscf (797 ppmv) total sulfur (as H_2S at standard conditions). [SIP Rule 404.E.1]

3) Liquid fuel sulfur content shall not exceed 0.50 wt% sulfur. [SIP Rule 404.E.1]

e. Carbon monoxide emissions shall not exceed 2000 ppmv at standard conditions. This condition shall not apply to internal combustion engines. [SIP Rule 406]

f. Metal surface coatings shall not be thinned or reduced with photochemically reactive solvents, as defined in SIP Rule 407. [SIP Rule 407.H.2]

g. Architectural coatings, which are purchased in containers of one (1) quart capacity or larger, shall not contain photochemically reactive solvents nor shall they be thinned or reduced with photochemically reactive solvents. [SIP Rule 407.H.3]

h. No photochemically reactive solvent, or any material containing that amount of photochemically reactive solvent, may be evaporated during the disposal of that solvent or material. [SIP Rules 205 and 407.H.4]

i. ConocoPhillips shall not vent organic compounds to the atmosphere during the depressurization, or vessel purging, steps of a refinery process turnaround. Compliance shall be accomplished by venting all uncondensing organic gases to a fuel gas system or to a flare. [SIP Rule 422]

j. This facility shall comply with all applicable provisions of the Air Toxic "Hot Spots" Act as set forth in Health and Safety Code Section 44300 (et seq.). [District-only, H&SC 44300 (et seq.) and, District-only, Rule 204.F.1]

k. All abrasive blasting shall be conducted in accordance with Title 17 of the California Code of Regulations (CCR). [District-only, CCR92000 (et seq.)]

    1) Each operator of this equipment shall be supplied with a copy of the abrasive blasting provisions of Title 17 and the APCO prepared summary of Title 17. [District-only, Rule 206]

    2) Abrasive blasting of items smaller than eight feet (8') shall be conducted within an enclosure or indoors. [District-only, CCR92000 (et seq.)]

    3) All dry, unconfined blasting shall utilize ARB certified abrasives. [District-only, CCR92000 (et seq.)]

    4) Areas surrounding the blasting operation shall be periodically washed, swept, vacuumed, or otherwise cleaned to prevent re-entrainment of dust. [District-only, Rule 206]

l. This equipment shall be operated consistent with the information provided in the Title V application under which this permit, or previous versions of this permit, were issued and shall be maintained in good working order at all times and in such a manner as to minimize the emission of air contaminants. [SIP Rule 201]

m. The APCO shall be notified in writing before any changes are made in the design, construction, or method of operation of this equipment, or any modifications are made to process conditions that might increase the emission of air contaminants in excess of existing permit limits, for those emission unit and pollutant combinations with such limits, or that might increase the potential to emit of any air contaminant, for those emission unit and pollutant combinations without current limits. [SIP Rule 201]

n. Spilled petroleum material shall be cleaned up as soon as possible to minimize hydrocarbon emissions and odors. Clean up materials shall be stored in closed containers in accordance with applicable regulations and disposed of as hazardous

material in compliance with federal, state, and local regulation. [District-only, Rule 206]

o. Any gasoline transfer to a stationary storage tank shall utilize a permanently installed submerged fill pipe and a tight-fitting nozzle. [SIP Rule 407.C.1.a]

p. ConocoPhillips shall follow good operating practices when storing or transferring gasoline including: [SIP Rule 424.B.5]

1) preventing spills;

2) utilizing closed storage containers; and

3) disposing of any gasoline in compliance with all applicable federal, state, and local regulations.

q. ConocoPhillips shall ensure that cold solvent metal cleaning devices, with the exception of wipe clean operations:

1) utilize: [SIP Rule 416.B]

i. a container for the solvent and the articles being cleaned;

ii. a cover, easily operated with one hand, which prevents the solvent from evaporating when the cleaning device is not in use;

iii. a shelf for draining cleaned parts such that the drained solvent is returned to the solvent storage container;

iv. a permanent, conspicuous label, which lists all applicable operating requirements; and

v. a freeboard ratio equal to or greater than 0.75, if the solvent surface area is greater than or equal to 5.4 square feet; and

2) are operated as follows. [SIP Rule 416.C]

i. All degreasing equipment and emission control equipment shall be operated and maintained in good working order.

ii. No solvent may be allowed to leak from the degreasing equipment.

iii. All solvent shall be stored and disposed of in a manner that prevents its evaporation to the atmosphere.

iv. The cover of any cleaning device shall not be removed unless that device is in use or undergoing maintenance.

v. The operator shall drain parts for at least fifteen (15) seconds after cleaning or until dripping ceases.

vi. Flowing solvent shall consist of a liquid stream and not a fine, atomized, or shower type spray; and the motive pressure for that solvent flow shall be sufficiently low to prevent the splashing of solvent beyond the container.

r. ConocoPhillips shall not ignite or maintain an open outdoor fire except as approved by the APCO for the purposes of employee instruction in fire fighting methods. [SIP Rule 501.A]

s. All subject processes shall comply with applicable provisions of 40CFR61, National Emission Standards for Hazardous Air Pollutants, subpart A, General Provisions, and all of the provisions of subpart M, Asbestos. [40CFR61.05.c and subpart M]

1) General Provisions. ConocoPhillips shall:

i. not fail to report, revise reports, or report source test results as required by subpart M; [40CFR61.05.d]

ii. ensure that any change to the information provided in the initial notification under 40CFR61.10.a shall be submitted to the APCO no later than thirty (30) calendar days after that change; [40CFR61.10.c]

iii. ensure that each subject process shall be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions; [40CFR61.12.c]

iv. ensure that regulated asbestos containing material (RACM) workers are adequately trained in accordance with 40CFR60.145.c.8; and [40CFR61.145.c.8]

v. not install or reinstall RACM. [40CFR61.148]

2) Applicability. The notification and procedural requirements of subpart M apply to demolition and renovation activity of regulated asbestos-containing material (RACM) involving: [40CFR61.145.a.1]

i. at least 260 linear feet of RACM on pipes,

ii. at least 160 square feet of RACM on other components, or

iii. at least thirty-five (35) cubic feet of RACM which has been removed from refinery components and is no longer otherwise measurable in the above units.

3) Notifications. ConocoPhillips shall submit the following notifications to the APCO and CALOSHA. [District-only, Rule 206 for the requirement to notify CALOSHA]

i. No later than ten (10) working days prior to any renovation or demolition involving that amount of RACM identified in condition III.A.1.s.2 and using a form similar to that shown in figure 3 to subpart M: [40CFR61.145.b.4]

(a) identify the notification as either an original or a revision;

(b) name, address, and telephone numbers of both the facility and the contractor, if appropriate;

(c) identify the activity as either demolition or renovation;

(d) location and description of the affected part of the facility including the affected part's size, age, and use;

(e) procedure used to detect the presence of RACM;

(f) the estimated amount of RACM involved and the basis for that estimate;

(g) scheduled starting and completion dates of the RACM work;

(h) description of RACM work, including the work practices, engineering controls, and waste-handling procedures to be used to comply with subpart M;

(i) name, location, and telephone number of the waste transporter and disposal site;

(j) certification that al least one properly trained person will supervise the activity; and

(k) description of procedures to be followed in the event that unexpected RACM is found or that Category II nonfriable asbestos containing material becomes crumbled, pulverized, or reduced to powder.

ii. If an RACM activity start date is after the date given in the original notification, provide verbal notification of the new date as soon as possible before the original date and a written notification as soon as possible, but no later than the original start date. [40CFR61.145.b.3.iv.A]

iii. If an RACM activity start date is earlier than the date given in the original notification, provide written notification at least ten (10) working days before the new start date. [40CFR61.145.b.3.iv.B]

iv. Update any previously provided notice, if the amount of RACM involved changes by at least twenty percent (20%) or if the start or end date of any activity changes. [40CFR61.145.b.2]

4) Emission Controls. ConocoPhillips and/or their contractor(s) shall comply with the procedures for asbestos emission control identified in 40CFR61.145.c. [40CFR61.145.c]

5) Waste Disposal. ConocoPhillips shall:

i. not discharge any visible emissions to the ambient air during the collection, processing, packaging, or transporting of asbestos-containing material (ACM), except as allowed by 40CFR61.150.a; [40CFR61.150.a]

ii. ensure that all ACM is properly disposed of as soon as practicable; [40CFR61.150.b]

iii. ensure that vehicles used to transport ACM are marked with visible signs in accordance with 40CFR61.149.d; [40CFR61.150.c]

iv. provide a copy of the ACM waste shipment record, as required under condition III.B.1.w, to the disposal site operator when the waste is delivered to their site; [40CFR61.150.d.2]

v. if a copy of a waste shipment record is not received within thirty-five (35) calendar days of the date that ACM waste was accepted by an initial transporter, contact the transporter(s) or the owner/operator of the designated waste disposal site to determine the status of the waste shipment; and [40CFR61.150.d.3]

vi. if a copy of a waste shipment record is not received within forty-five (45) calendar days of the date that ACM waste was accepted by an initial transporter, provide a written report to the APCO and CALOSHA which includes the waste shipment record of concern and details ConocoPhillips' efforts to determine the shipment's status. [40CFR61.150.d.4]

t. All subject processes shall comply with the provisions of 40CFR61, National Emission Standards for Hazardous Air Pollutants, subpart A, General Provisions, and subpart FF, Benzene Waste Operations. [40CFR61.05.c and subpart FF]

1) General Provisions

i. Tosco shall not fail to report, revise reports, or report source test results as required by subpart FF. [40CFR61.05.d]

ii. Any change to the information provided in the initial notification under 40CFR60.10.a shall be submitted to the APCO no later than thirty (30) calendar days after that change. [40CFR61.10.c]

iii. Each subject process shall be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. [40CFR61.12.c]

2) ConocoPhillips shall determine the total annual benzene waste quantity (TABQ) generated using the procedures in 40CFR61.355: [40CFR61.355.a]

i. annually for the preceding calendar year, and [40CFR61.355.a]

ii. whenever there is a change in the process generating the waste that could cause the TABQ to increase to ten (10) megagrams per year or more. [40CFR61.355.a.4.ii]

3) Whenever a TABQ determination is made under condition III.A.1.t.2.ii above, ConocoPhillips shall submit an update of their original report under

40CFR61.357.a to the APCO, with a copy to the EPA Region IX administrator. [40CFR61.357.c]

u. ConocoPhillips shall comply with all applicable provisions of 40CFR82, Protection of Stratospheric Ozone. [40CFR82.1.b]

1) ConocoPhillips shall comply with the ozone-depleting substance (ODS) labeling standards of 40CFR82 subpart E. No person may modify, remove, or interfere with a required warning statement, except as described in 40CFR82.112. [40CFR82.112.a]

2) ConocoPhillips shall comply with the recycling and emissions reduction standards of 40CFR82 subpart F. [40CFR82.150.b]

i. ConocoPhillips shall comply with 40CFR82.156 when opening any appliance for maintenance, service, repair, or disposal.

ii. ConocoPhillips shall ensure that recycling and recovery equipment used during the maintenance, service, repair, or disposal of appliances complies with 40CFR82.158.

iii. ConocoPhillips shall ensure that any person performing maintenance, service, or repairs on, or disposing of, appliances is currently certified under a technician certification program that has been approved under 40CFR82.161.

iv. ConocoPhillips shall comply with the recordkeeping requirements of 40CFR82.166 when disposing of small appliances or motor vehicle air conditioner (MVAC)-like appliances.

v. ConocoPhillips shall comply with the leak repair requirements of 40CFR82.156.

vi. ConocoPhillips shall maintain a record of refrigerate purchased and added to the coker control room chiller, which contains fifty (50) pounds or more of refrigerate, as required by 40CFR82.166.

3) ConocoPhillips shall not perform maintenance, service, or repairs on MVACs. [SIP Rule 205]

4) For any given equipment, ConocoPhillips may at any time, and without prior notification to the APCO, switch from the use of an ODS to an alternative substance, which has been approved under the Significant New Alternatives Program of 40CFR82 subpart G, and shall comply with any use restriction for that alternative substance which was set by the applicability decision. [40CFR82.174.c]

v. A copy of the State certification must be readily available for any portable equipment that operates at ConocoPhillips' Santa Maria Facility and is registered with ARB pursuant to CCR Title 13, section 2450 (et seq.). [SIP Rule 205]

w. This facility shall comply with all applicable provisions of District Rule 433, Architectural Coatings. [District-only, Rule 433]

2. Compliance with Permit Conditions

a. ConocoPhillips shall comply with all terms and conditions of this permit. Non-compliance constitutes a violation of the federal Clean Air Act. Continuing non-compliance with any federally-enforceable permit condition is grounds for permit termination, revocation and reissuance, modification, enforcement action, or denial of permit renewal. [Rule 216.F.1.f for all "federally-enforceable" conditions and, District-only, Rule 206 for "District-only" enforceable conditions]

b. The need to halt or reduce a permitted activity in order to maintain compliance shall not be used as a defense for noncompliance with any permit condition. [Rule 216.F.1.g]

c. This permit may be reopened by the APCO at any time for cause. For the purposes of this permit, the following circumstances shall constitute cause. [Rule 216.K.1]

   1) ConocoPhillips becomes subject to an additional federally-enforceable requirement, the remaining term of this permit is three years or more, and the effective date of that requirement is not later than the date on which this permit is due to be reissued. [Rule 216.K.1.a]

   2) The APCO or the EPA determine that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards, terms, or conditions of the permit. [Rule 216.K.1.c]

   3) The APCO determines that this permit must be revised or revoked to assure compliance with any applicable requirement, or EPA determines that the permit must be revised or revoked to assure compliance with any federally-enforceable requirement. [Rule 216.K.1.d]

   4) A TABQ equal to or exceeding ten (10) megagrams in any given year, as determine under 40CFR61 subpart FF and condition III.A.1.t to this permit, shall be considered cause for reopening this permit. [40CFR61.342.b]

d. This permit does not convey property rights or exclusive privilege of any sort. [Rule 216.F.1.i]

e. Within a reasonable time period, ConocoPhillips shall furnish any information requested by the APCO, for the purpose of determining:

   1) compliance with this permit; [Rule 216.F.1.j.2]

   2) air contaminant emissions; [SIP Rule 205]

   3) whether or not cause exists to modify, revoke, reissue, or terminate this permit; or [Rule 216.F.1.j.1]

   4) whether or not cause exists for an enforcement action. [Rule 216.F.1.j.2]

f. If ConocoPhillips is not in compliance with any federally-enforceable requirement , they shall submit to the APCO a schedule of compliance, which has been approved by the Hearing Board. [Rule 216.F.2.c]

g. A pending permit action, or notification of anticipated noncompliance, does not stay any condition of this permit. [SIP Rule 205]

h. All terms and conditions of this permit are enforceable by the EPA Administrator and citizens of the United States under the federal Clean Air Act unless referenced as being based on a District-only requirement. All terms and conditions of this permit, including those referenced as being based on a District-only requirement, are enforceable by the APCO. [Rule 216.F.3]

i. This permit, or a true copy, shall be made readily accessible at ConocoPhillips' Santa Maria Facility and shall not be altered or defaced in any way. [SIP Rule 201.E&F]

j. The terms and conditions of this permit shall apply to the equipment listed herein, which is operated by either ConocoPhillips or their contractor(s), and located at 2555 or 2565 Willow Road, Arroyo Grande, California, or on contiguous properties to those addresses, which are owned and controlled by ConocoPhillips. [SIP Rule 205]

k. A permit revision shall not be required to implement processes changes, economic incentives, marketable permits, emissions trading and other similar programs that are provided for elsewhere in this permit. [Rule 216.F.1.l]

3. Emergency Provisions. ConocoPhillips shall comply with the requirements of District Rule 107, Upset and breakdown Conditions. [Rule 107]

4. Federal Regulation and District Compliance Plans

a. The federally-enforceable compliance plan for total sulfur compounds as sulfur dioxide from the carbon plant kiln stack is attached as appendix A. Compliance is indicated by operating with a combination of production rate and green coke percent sulfur that plots to the left and below of the line indicated in the compliance plan. [SIP Rule 114.1.a and Rule 206]

b. ConocoPhillips will continue to comply with those permit conditions with which it is in compliance, as identified in this permit. [Rule 216.F.1.f & L.2.b]

c. ConocoPhillips shall comply with all federally-enforceable requirements that become applicable during the permit term, in a timely manner, as identified in this permit. [Rule 216.F.1.f & L.2.c]

d. ConocoPhillips shall comply with all APCO approved compliance plans. [District-only, Rule 206]

e. No later than sixty (60) calendar days after the completion of an engine retrofit or replacement under condition III.C.11, ConocoPhillips shall submit an Engine Operator Inspection Plan for the APCO's approval. At a minimum, that Plan shall include the following. [District-only, Rule 431.E]

1) The manufacturer, model number, rated horsepower, and combustion type of the engine.

2) A description of the NO_x control system installed on the engine, including type and manufacturer, as well as a description of any ancillary equipment related to the control of emissions.

3) The facility-defined equipment identification number and the location of the engine on a map or plot plan of the affected facility.

4) A specific engine inspection procedure to ensure that the engine is operated in compliance with the provisions of Rule 431. That procedure shall include an inspection schedule and the inspection log format as required by Section G of Rule 431. Inspections shall be conducted every quarter or after every 2,000 hours of engine operation. In no event shall the frequency of inspection be less than once per year.

5) A description of each preventive or corrective maintenance procedure or practice that will be used to maintain the engine and NO_x control system in compliance with the provisions of Rule 431.

5. Right of Entry. The Regional Administrator of U.S. Environmental Protection Agency, the Executive Officer of the California Air Resources Board, the APCO, or their authorized representatives, upon the presentation of credentials, shall be permitted to enter upon the premises and, at reasonable times, be permitted to: [Rule 216.F.2.a]

a. inspect the stationary source, including equipment, work practices, operations, and emission-related activity; and

b. inspect and duplicate records required by this Permit to Operate; and

c. sample substances or monitor emissions from the source or other parameters to assure compliance with the permit or applicable requirements. Monitoring of emissions can include source testing.

6. Severability. The provisions of this Permit to Operate are severable, and, if any provision of this Permit to Operate is held invalid, the remainder of this Permit to Operate shall not be affected thereby. [Rule 216.F.1.e]

7. Circumvention. ConocoPhillips shall not build, erect, install, or use, any article, machine, equipment, or process subject to an applicable standard, if the use of which conceals an emission that would otherwise constitute a violation of that standard. [40CFR60.12, 61.19, & 63.4.b]

8. Permit Life. This Permit to Operate shall become invalid five (5) years from the original effectiveness date unless a timely and complete renewal application is submitted to the District. ConocoPhillips shall apply for renewal of this permit no later than six (6) months before the date of expiration. Upon submittal of a timely and complete renewal application, this permit to operate shall remain in effect until the APCO issues or denies the renewal application. [Rule 216.I.1, I.2, & I.4]

9. Payment of Fees. ConocoPhillips shall remit Title V compliance determinations fees to the District in response to the District's invoice on a timely basis. Failure to remit fees in accordance with District Rule 302 shall result in forfeiture of this Permit to Operate. Operation without a permit to operate subjects the source to potential enforcement action by the District and the U.S. EPA pursuant to section 502(a) of the Clean Air Act. [Rule 216.F.1.k]

B. Specific Recordkeeping, Inspection, and Reporting Requirements. All records shall be retained for a minimum of five (5) years and be made available to the APCO upon request. For the purposes of this permit, records shall be considered all calibration and maintenance records, all original strip-chart or electronic recordings for continuous monitoring and instrumentation, all records specifically required to be maintained herein, and copies of all reports required to be submitted herein. [District-only, Rule 206, for "District-only" records; Rule 216.F.1 for all other records; and, for B-505, 40CFR60.48c.i]

1. Recordkeeping. ConocoPhillips shall record the following.

a. All AN-1707/1709 tail gas CMS data as follows:

1) any measurement made; [40CFR60.105.a.6]

2) relative accuracy tests performed in accordance with EPA Method 15; [SIP Rule 205]

3) calibration drift test results as required by 40CFR60.PS-5; [40CFR60.PS-5]

4) daily records of the calibration including the date, zero and span values, and calibration drift; [40CFR60.13.d.1]

5) records of all maintenance: [SIP Rule 205]

i. date, place, and time of maintenance activity;
ii. operating conditions at the time of maintenance activity;
iii. date, place, name of company or entity that performed the maintenance activity and the methods used; and
iv. results of the maintenance;

6) all data sufficient to report excess emissions and CMS downtime as required by 40CFR60.105.e.4.ii and 40CFR60.7.c; and [SIP Rule 205]

7) the original FQI-1721/FQI-1759 “Combined CEM Recorder” strip chart which shows tail gas H2S and TRS, combustor duty, and fuel gas sulfur content as the preferred record, with either DCS data or the back-up CEM strip chart from Sulfur Panel Analyzer Recorder #2 as approved alternatives to the FQI-1721/FQI-1759 chart. [District-only, Rule 206]

b. AN-603 fuel gas hydrogen sulfide CMS data as follows:

1) any measurement made; [40CFR60.105.a.4]

2) relative accuracy tests performed in accordance with EPA Method 15; [SIP Rule 205]

3) calibration drift test results as required by 40CFR60.PS-7; [40CF60.PS-7.6.2]

4) daily records of the calibration including the date, zero and span values, and calibration drift; [40CFR60.13.d.1]

5) records of all maintenance: [SIP Rule 205]

i. date, place, and time of maintenance activity;
ii. operating conditions at the time of maintenance activity;
iii. date, place, name of company or entity that performed the maintenance activity and the methods used; and
iv. results of the maintenance; and

6) all data sufficient to report excess emissions and CMS downtime as required by 40CFR60.105.e.3.ii and 40CFR60.7.c. [SIP Rule 205]

c. Boilers B-504, B-505, and B-506 fuel usage continuously, including an hourly summary, with the Distributed Control System (DCS) and at least once per shift in an operating log.
[District-only Rule 206 for B-504 DCS records,
SIP Rule 205 and 40CFR60.48c.g for B-505 DCS records, and
SIP Rule 205 and 40CFR60.49b.c.3 for B-506 DCS records; and
District-only, Rule 206 for all unit operating logs]

d. Coke calcining waste heat boiler, and boilers B-504, B-505, and B506 steam production continuously, including an hourly summary, with the DCS and at least once per shift in an operating log.
[SIP Rule 205 and 40CFR60.49b.c for B-506 DCS records,
District-only Rule 206 for all other unit DCS records,
and District-only, Rule 206 for all unit operating logs]

e. The following parameters for the B-2A/B, B-62A/B, and B-102A/B heaters. The fuel gas heat content shall be based on the average results of the most recent three months of fuel gas GHV testing. [District-only, Rule 206]

1) Hourly heat input for each heater in terms of mmBtuh.

2) Monthly heat input for each heater in terms of mmBtu per month.

3) Hourly heat input for the B-2A, B-62A, and B-102A heaters combined, and for the B-2B, B-62B, and B-102B heaters combined, on a daily average and in terms of mmBtuh.

4) Cumulative heat input for each heater in terms of mmBtu, on a monthly basis, for the most recent 12-month rolling period.

f. The following parameters for the B-505 boiler. For the purposes of this condition, the fuel gas heat content shall be based on the results of the most recent compliance testing. [District-only, Rule 206]

1) Hourly heat input, on a daily average and in terms of mmBtuh.

2) Cumulative heat input, in terms of mmBtu, for the current calendar year.

3) During any period when steam from the B-505 boiler is being supplied to the utility plant, the start and stop time of that period and the combined steam production of the carbon plant waste heat boiler, B-504 boiler, and B-506 boiler on an hourly basis in an operating log.

g. The total daily crude oil feed to the refinery in barrels and, at the end of each calendar month, the cumulative total crude oil feed for the preceding 12-month rolling period. [District-only, Rule 206]

h. The maximum hourly green coke feed to the carbon plant in pounds on a daily average basis. [SIP Rules 205 and 114.1.a]

i. All periods that the coke calcining kiln is not in operation. [District-only, Rule 206]

j. All periods that the carbon plant waste heat boiler is not in operation. [District-only, Rule 206]

k. Calcining kiln preheater system triethylene glycol usage (TEG) in the form of monthly TEG additions to the system and the cumulative total amount charged for the preceding 12-month rolling period. [District-only, Rule 206]

l. Until September 1, 2003, and at least once per day, the pressure drop across the coke calcining kiln, cold side multiclone. Subsequent to September 1, 2003, see condition III.B.1.ah.3 below. [District-only, Rule 206]

m. The daily amount of sulfur pelletizing plant production and shipping, when operation occurs during any part of a day. That record shall also include a running balance of stockpiled sulfur. [District-only, Rule 206]

n. Calcined coke product elevator bypass conveyor usage including the date of operation, number of hours of operation, the reason for use, and the amount of material conveyed. All information may be reflected on the operator's log sheet. [District-only, Rule 206]

o. Gas oil loading and unloading at the gas oil loading rack. [District-only, Rule 206]

p. Calcined coke handling, storage, and loading equipment inspection dates and results. Equipment repair date and description, if applicable, shall also be included. [District-only, Rule 206]

q. Sulfur pit air sweep quarterly air flowrate results performed under condition III.B.2.e below. [District-only, Rule 206]

r. Inspection results, adjustments, and repairs made to any floating roof storage tank seal. [for Tanks 800, 801, 822, 823, 900, & 901 District-only, Rule 206 and for Tank 903, SIP Rule 205 and 40CFR60.116b.a]

s. The location, date, and corrective action taken for the following units subject to 40CFR60, subpart QQQ, Waste Water Systems: [40CFR60.697.b thru e]

    1) drains, if a water seal is found dry, a drain cap or plug is found missing, or any other problem is identified that could result in VOC emissions;

    2) junction boxes, if a broken seal, gap, or any other problem is identified that could result in VOC emissions;

    3) sewer lines, if any problem is identified that could result in VOC emissions;

4) oil-water separators, if any problem is identified that could result in VOC emissions; and

5) closed vent systems, if a leak is measured or any problem is identified that could result in VOC emissions. In addition, the background level and the maximum level of VOC concentration shall be recorded if a leak is measured.

6) If repairs cannot be performed without process unit shutdown, the reason for delay, the expected date of repair, the signature of the person responsible for the delay, and the date of successful repair shall be recorded.

t. For the life of the refinery, ConocoPhillips shall maintain a copy of the design specification used to comply with 40CFR60, subpart QQQ, Waste Water Systems. [40CFR60.697.f]

u. For the life of the refinery, ConocoPhillips shall maintain plans and specification as necessary to qualify for the exclusions allowed under 40CFR60, subpart QQQ, Waste Water Systems, as follows: [40CFR60.697.g thru j]

1) capped or plugged inactive drain location; and

2) stormwater sewer, ancillary equipment, and non-contact cooling water separation from the oil water drain system.

v. All records required under 40CFR60 subpart GGG. [in addition to the references cited below, the following reference(s) shall apply to each requirement: 40CFR60.592.e and, for all naphtha stream components, 40CFR63.648.a]

1) A list of all subject components categorized by type of service. [40CFR60.486.e.1]

2) A list, which has been signed by the owner or operator, of all components designated as having no detectable emissions. [40CFR60.486.e.2]

3) For each compliance test to determine no detectable emissions, the following data: [40CFR60.486.e.4]

i. the beginning date of the test,

ii. the measured background level, and

iii. the maximum instrument reading.

4) A list of all valves designated as unsafe-to-monitor or difficult-to-monitor, including an explanation for that designation and a plan for monitoring each valve. [40CFR60.486.f]

5) If a leak is detected, log the following data: [40CFR60.486.c]

i. the instrument, operator, and equipment identification numbers;

ii. the dates of detection and each repair attempt;

iii. the method of each repair attempt;

iv. the phrase "above 10,000", if the maximum instrument reading after an attempt at repair is equal to or greater than 10,000 ppm; and

v. the date of successful repair of the leak.

6) If a leak is not repaired within fifteen (15) calendar days of detection, log the following data: [40CFR60.486.c]

i. the phrase "repair delayed," the reason for the delay, and the expected date of repair;

ii. the printed name of the owner or operator whose decision is was that a repair must be delayed, if the reason for delay is that the repair could not be effected without a process shutdown;

iii. the date(s) of the respective process unit's shutdown that occur while the equipment is not repaired.

7) For closed vent systems, the relief and recovery system, and the flare system: [40CFR60.486.d]

i. detailed schematics, design specifications, and P&ID drawings;

ii. the date(s) and description(s) of any changes in the design specifications;

iii. the description of the parameter(s) monitored to ensure that the systems are operated and maintained in accordance with their design and an explanation of why each parameter was selected for monitoring; and

iv. a log of:

(a) periods when the systems are not operating as designed, including when the flare pilot flame is extinguished; and

(b) dates of startup and shutdown of the systems.

w. All records required under 40CFR61 subpart M. For all asbestos containing material (ACM) transported away from the Santa Maria Facility, and using a form similar to that shown in figure 4 to subpart M, record the following. [40CFR61.150.d.1]

1) The name, address, and telephone number of the waste generator.

2) The District's name and address as the local agency responsible for administering the asbestos NESHAP program.

3) The approximate quantity of ACM in cubic yards.

4) The name and telephone number of the disposal site operator.

5) The name and physical location of the disposal site.

6) The date transported.

7) The name, address, and telephone number of the transported.

8) A certification the ACM are fully and accurately described; are classified, packed, marked, and labeled; and are in all respects in proper condition for transport.

x. All records required under 40CFR61 subpart FF. [in addition to the references cited below, the following reference shall apply to each requirement: 40CFR61.355.a.4.i]

1) A record that identifies each waste stream that is subject to subpart FF. [40CFR61.356.b]

2) For each waste stream which is subject to subpart FF, a record which includes all test results, measurements, calculations, and other documentation used to determine the following information for that waste stream: [40CFR61.356.b.1]

i. waste stream identification,

ii. water content,

iii. whether of not the waste stream is a process water stream,

iv. annual waste quantity,

v. benzene concentration range,

vi. annual average flow-weighted benzene concentration, and

vii. annual benzene quantity.

3) When the annual waste quantity for process unit turnaround waste is determined by selecting the highest annual quantity of waste managed from historical records representing the most recent five (5) years of operation, a record which includes all test results, measurements, calculations, and other documentation used to determine the following information: [40CFR61.356.b.5]

i. identification of the process units undergoing turnaround,

ii. most recent turnaround date for each unit,

iii. identification of each process unit turnaround waste,

iv. water content of the waste,

v. annual waste quantity,

vi. benzene concentration range of the waste,

vii. annual average flow-weighted benzene concentration of the waste, and

viii. annual benzene quantity.

y. The manufacturer's brand name and designation of each solvent used to thin or reduce any coating which is applied to a metal surface by either ConocoPhillips or any contractor employed by ConocoPhillips. Purchase records will be sufficient to satisfy this recordkeeping requirement. Material Data Safety Sheet information sufficient to determine the non-photochemical reactivity of those solvents shall be maintained within easy access of this record. [SIP Rule 407.H.2]

z. The manufacturer's brand name and designation of each architectural coating used in containers of one quart capacity or larger, and the solvent used to thin or reduce those coatings, which is applied by either ConocoPhillips or any contractor employed by ConocoPhillips. Purchase records will be sufficient to satisfy this recordkeeping requirement. Material Data Safety Sheet information sufficient to determine the non-photochemical reactivity of those coatings and solvents shall be maintained within easy access of this record. [SIP Rule 407.H.3]

aa. The following information during startup, shutdown, and malfunction (SSM) periods. [40CFR63.10.b.2 and SIP Rule 205]

1) The title of the federal standard for which the approved SSM plan is activated.

2) The process equipment and/or air pollution control equipment involved.

3) The occurrence and duration of each SSM of that equipment.

4) Actions taken which are different from those in the approved SSM plan, or

5) Sufficient information to demonstrate that the actions taken were in accordance with the SSM plan.

ab. Daily calcined coke production in tons. [District-only, Rule 206]

ac. (deleted)

ad. Periodic and corrective maintenance of the magnesium hydroxide addition system at the carbon plant, while the kiln and baghouse are still in operation. At a minimum, that record shall include the date, start time, duration in minutes, and reason for such maintenance. All information may be reflected on the operator's log sheet. [District-only, Rule 206]

ae. The following records shall be maintained on a monthly basis for any engine having undergone retrofit or replacement under condition III.C.11. [District-only, Rule 431.G.1]

1) date and results of each engine inspection,

2) a summary of any preventive or corrective maintenance taken,

3) the total hours of operation,

4) the type and quantity of fuel used, and

5) any additional information required in the Engine Operator Inspection Plan.

af. Reverse Osmosis Unit (ROU) Emergency Standby Generator [District-only, Rule 206]

1) For each delivery of fuel to the tank supplying the ROU standby engine, ConocoPhillips shall retain a copy of the purchase invoice. Each invoice must indicate whether or not the fuel complies with condition III.E.7.e below.

2) ConocoPhillips shall maintain an operational log for the ROU standby engine that records:

i. the date, number of hours, running totals of emergency and non-emergency hours for the current calendar year,

ii. monthly fuel usage, and

iii. reason for each operating period.

ag. Emergency Water Pump Engines, G-515-3 and G-515-4. An operating and inspection log for the G-515 engines shall be maintained on a monthly basis and on any day the engines are operated that includes the following data: [District-only, Rule 206]

1) date and results of each engine inspection, if newly performed since last entry,

2) a summary of any preventive or corrective maintenance taken,

3) the total minutes of operation for each engine and whether the operation was for maintenance or emergency,

4) the quantity of fuel used, and

5) any additional information required in the Engine Operator Inspection Plan.

ah. Record the following to implement CAM for the calciner cold-side control system. [40CFR64.9.b]

1) The presence of a steam plume at the calcined coke wet scrubber exhaust stack each shift.

2) The presence of water flowing to the drain for the calcined coke wet scrubber each shift.

3) Beginning September 1, 2003, multiclone differential pressure drop in units of inches of water each shift.

4) Results of the monthly inspection for proper operation of the control equipment.

5) Results of the annual calibration of the multiclone differential pressure indicator.

6) Repairs and maintenance performed on the multiclone differential pressure indicator.

7) Results of the annual compliance testing for particulate matter emissions from the wet scrubber exhaust stack.

8) Description, cause, and corrective action taken for any excursions.

9) The date, time, and names of instructor(s) and students involved with training on the operation and repair of the multiclone, its differential pressure indicator, and wet scrubber.

10) The list of spare parts retained on hand for routine repair of the multiclone, its differential pressure indicator, and the wet scrubber.

ai. Record the following to implement CAM for the calciner hot-side control system. [40CFR64.9.b]

1) Percent sulfur by weight in the green coke feed once per day.

2) Ohmart scale, supplemental, and total green coke feed rates in pounds per hour on a daily average basis.

3) Beginning September 1, 2003, subject to the APCO's approval, and at least once each shift, the manufacturer's recommended data for the increased particulate matter detector that indicate proper operation and no increase particulate matter discharge.

4) Results of the monthly inspection for proper operation of the baghouse, Ohmart scale, and, beginning September 1, 2003, increased particulate matter detector.

5) Results of the annual calibration of the Ohmart scale and the increased particulate matter detector.

6) Repairs and maintenance performed on the baghouse, Ohmart scale, and increased particulate matter detector.

7) Results of the annual compliance testing for oxides of sulfur and particulate matter emissions from the calciner cold stack.

8) Description, cause, and corrective action taken for any excursions.

9) The date, time, and names of instructor(s) and students involved with training on the operation and repair of the baghouse, Ohmart scale, and increased particulate matter detector.

10) The list of spare parts retained on hand for routine repair of the baghouse, Ohmart scale, and increased particulate matter detector.

2. Inspections, calibrations, and sampling. ConocoPhillips shall inspect, calibrate, or sample, the following processes as indicated. The results shall be recorded in an operational log or as specified. [SIP Rule 205 and, for "District-only" inspections, District-only, Rule 206]

a. On a **Per Shift** Basis

Process	Desc/ID	Parameter
B-2-j	TK-405 & 406	1) Visually inspect for floating oil. Record the date, time, staff initials, surface area appearance in oil percentage, and tank activity at the time of observation. [District-only, Rule 206] i. ConocoPhillips shall take immediate action to reposition the installed oil skimmer to maximize oil collection for either tank in which greater than fifty percent (50%) of oil coverage is observed. Following such an observation, the oil coverage shall be monitored at least every half-hour, and the installed oil skimmer repositioned as necessary, until the observed oil coverage is less than fifty percent (50%). ii. The final observation during a greater than 50% oil coverage episode shall be logged and the length of that episode noted.
A-1,A-2, B-1,B-2, B-3,C, D-1,E-1, E-2,G,H, I,J,K,L, O,P,R-1	fugitive emis-sions program	2) On a continual basis and by using visual, audible, or olfactory means, monitor all pumps and valves in heavy liquid service, pressure relief valves in light liquid or heavy liquid service, and flanges and other connectors for leaks. Within five (5) calendar days of detecting evidence of a leak, the suspected component shall be monitored with an instrument. [40CFR60.482-8] i. A leak is defined as an instrument reading of 10,000 ppm or greater. ii. A leaking component shall be affixed with a weatherproof tag that displays the respective equipment's identification number. This tag may be removed upon repair, except for valves that must be monitored for two (2) successive months following repair and found to not leak before their tag may be removed. [40CFR60.486.b] iii. Any leak shall be repaired as soon as practicable, with the first repair attempt occurring within five (5) calendar days and the final repair not later than fifteen (15) calendar days after detection, except as allowed under condition III.B.3.i.
R-2	calciner cold-side control system	3) Confirm water flow to the wet scrubber for the calcined coke cooling system by visual observation of a steam plume from the scrubber's exhaust. [40CFR64.6.c.3]
		4) Confirm normal operation of the wet scrubber by visual observation of water flow to the system drain. [40CFR64.6.c.3]
		5) Beginning September 1, 2003, confirm normal operation of the multiclone for the calcined coke cooling system by observing that the differential pressure across the device does not exceed 5.0 inches of water. [40CFR64.6.c.3]

(continued)

a. On a **Per Shift** Basis (continued)

Process	Desc/ID	Parameter
R-3	calciner hot-side control system	6) Beginning September 1, 2003, confirm proper operation of the increased particulate matter detector and no increased particulate matter discharge from the calciner cold stack based on the readings of that detector. [40CFR64.6.c.3]

b. On A **Daily** Basis

Process		Description	Parameter
1)	B-1-h	cooling tower	Visually inspect for floating oil. [District-only, Rule 206]
2)	J	AN-603	Analyzer calibration. [40CFR60.13.d.1]
3)	K	AN-1707/1709	Analyzer calibration. [40CFR60.13.d.1]
4)	R-1	green coke feed rate	Quantify the green coke feed rate in tons per hour on a daily average. [40CFR64.6.c.3]
5)			Quantify the green coke sulfur content in weight percent. [40CFR64.6.c.3]

c. On A **Weekly** Basis

Process		Description	Parameter
1)	B-1-h	cooling tower	Sample for floating oil using current EPA method for determining oil and grease in water. [District-only, Rule 206]
2)	I,J	fuel gas	Fuel gas shall be sampled for hydrogen sulfide by using the drager tube method and total sulfur content using the Tutweiler test method. [SIP Rule 205 and SIP Rule 404.E.1 for total sulfur]
3)	I,J	sulfanol	The concentration of Sulfolane W in the D601A and D601B H_2S absorbers shall be sampled using a method subject to the approval of the APCO and recorded. [District-only, Rule 204]
4)	A-1,A-2,B-1, B-2,B-3, C, D-1,E-1,E-2, G,H,I,J,K,L, O,P,R-1	fugitive emissions program	Inspect each pump in light liquid service for leaks, except those designated as having no detectable emissions. A "leak" is defined as liquid dripping from the pump seal. See condition III.B.2.a.2 above for tagging and repair requirements. [40CFR60.482-2.a.2, 40CFR60.482-2.d.4, and, for all naphtha stream components, 40CFR63.648.a]

d. On A **Monthly** Basis (a)

Process		Description	Parameter
1)	A-2,E-1,E-2, G,I,J,L,O,P	active drains, drain hubs, and catch basins	Inspect each drain, drain hub, and catch basin for indications of low water level, or other condition which would reduce the effectiveness of the water seal control. [40CFR60.692-2.a.2] i. Water shall be added if low water level is found. ii. All other abnormal conditions shall be repaired as soon as practicable, but not later than twenty-four (24) hours after detection, except as allowed under condition III.B.3.i.
2)	S-1,S-2,S-3	calcined coke handling, storage, and loading	Inspect all equipment to verify proper operation. All deficiencies shall be repaired within forty-eight (48) hours. [District-only, Rule 206]
3)	A-1,A-2,B-1, B-2,B-3,C, D-1,E-1,E-2, G,H,I,J,K,L, O,P,R-1	fugitive emissions program	Monitor each pump in light liquid service for leaks, except for those with dual mechanical seals or those designated as having no detectable emissions. See condition III.B.2.a.2 above for tagging and repair requirements and the definition of "leak." [40CFR60.482-2.a.1 and, for all naphtha stream components, 40CFR63.648.a]
4)	R-1	calciner green coke feed system	Inspect the Ohmart scale, green coke sulfur content determination equipment, and supplemental green coke feed rate determination equipment for proper operation. [40CFR64.6.c.3]
5)	R-2	calciner cold-side control system	Inspect the calcined coke wet scrubber, multiclone, and, beginning September 1, 2003, its differential pressure indicator for proper operation. [40CFR64.6.c.3]
6)	R-3	calciner hot-side control system	Inspect the baghouse and, beginning September 1, 2003, increased particulate matter detector for proper operation. [40CFR64.6.c.3]

Note (a) See condition III.D.7.a for monthly fuel gas sampling requirements.

e. On A **Quarterly** Basis

Process		Description	Parameter
1)	E-1, E-2	sulfur pits	Inspect the air intake sweeps for both the A and B side sulfur pits for proper operation of the pit vent system and quantitatively measure the air flowrate through each sweep. [District-only, Rule 206]
2)	B-1,D-1, M	diesel engines (a)	Inspect subject units in accordance with the Engine Operator Inspection Plan approved under condition III.A.4.e. [District-only, Rule 431.E.4]
3)	D-1	G-515-3 G-515-4	Inspect subject units in accordance with the Engine Operator Inspection Plan submitted on March 18, 2002, under application number 3111. [District-only, Rule 206]

Note (a) Excluding the ROU standby engine and the G-515-3 and G-515-4 emergency water pump engines.

f. On A **Semi-annual** Basis

Process	Description	Parameter
A-2,E-1, E-2,G,I, J,L,O,P	inactive drains	1) Inspect each plugged or capped drain to ensure that the plug or cap is in place and properly installed. Any abnormal condition shall be repaired as soon as practicable, but not later than twenty-four (24) hours after detection, except as allowed under condition III.B.3.i. [40CFR60.692-2.a.4]
	junction boxes and manholes	2) Inspect each junction box and manhole to ensure the cover is in place and that the edge is tightly sealed. Any abnormal condition shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after detection, except as allowed under condition III.B.3.i. [40CFR60.692-2.b.3]
	F-821A,B,& C,F-824, F-408&9	3) Inspect each oil-water separator, oily solids tank, and the slop oil tank to ensure there are no cracks or gaps in any seal and that all access doors and other openings. Any abnormal condition shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after detection, except as allowed under condition III.B.3.i. [40CFR60.692-3.a.4]
	closed vent systems	4) Inspect each closed vent system for leaks. A "leak" shall be defined as an instrument reading of 500 ppm as methane. Any leak shall be repaired as soon as practicable, but not later than thirty (30) calendar days after detection, except as allowed under condition III.B.3.i. [40CFR60.692-5.e.1]
	unburied sewer lines	5) Inspect each unburied sewer line for cracks, gaps, or other problems. Any abnormal condition shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after detection, except as allowed under condition III.B.3.i. [40CFR60.692-2.c.2]
G	TK-822,823	6) Inspect all access doors and other openings to ensure that there is a tight fit around the edges and to identify other problems that could result in VOC emissions. [District-only, Rule 206]

g. On An **Annual** Basis

Process		Description	Parameter
1)	A-1	TK-900, 901,903	i. Inspect the primary seal at four (4) locations to be selected by the APCO. [District-only Rule 425.G.6 for Tanks 900 & 901, federally-enforceable 40CFR60.113b.b.1.i and Rule 425.G.6 for Tank 903]
		TK-900,901	ii. Inspect the secondary seal. [District-only, Rule 425.I.1]
		TK-903	iii. Inspect the secondary seal. [40CFR60.113b.b.1.ii and Rule 425.I.1]
2)	G	TK-822,823	Inspect the secondary seal. [District-only, Rule 206]
3)	A-1,A-2,B-1, B-2, B-3,C, D-1,E-1,E-2, G,H,I,J,K,L, O,P,R-1	fugitive emissions program	Within one week's time, monitor all valves in gas/vapor or light liquid service for leaks. See condition III.B.2.a.2 above for tagging and repair requirements and the definition of "leak." [40CFR60.483-1.b.2, 40CFR60.483-1.c.1 and, for all naphtha stream components, 40CFR63.648.a]
4)			Monitor each component for leaks that has been designated as having no detectable emissions as follows. "No detectable emissions" is defined as an instrument reading of less than 500 ppm above background. See condition III.B.2.a.2 above for tagging and repair requirements and the definition of "leak": [for all naphtha stream components, 40CFR63.648.a] i. pumps in light liquid service [40CFR60.482-2.e.3] ii. compressors [40CFR60.482-3.i.2] iii. closed vent systems [40CFR60.482-10.f.2]

h. On an **annual** basis, calibrate the following recording or indicating devices. Upon successful calibration, a notation shall be made on the cover glass of each device, or other such readily visible location, that includes the date of calibration and the individual's initials that performed the calibration. [40CFR64.3.b.2 for process R-2 and District-only Rule 206 for all others]

Process		Description	Parameter
1)	D-1	B-504, 506	i. Individual boiler inlet fuel flow instruments. [40CFR60.49b.c for B-506 and District-only, Rule 206 for B504]
			ii. Individual boiler steam production instruments. [40CFR60.49b.c for B-506 and District-only, Rule 206 for B504]
2)	R-3	carbon plant waste heat boiler	Steam production instrument. [District-only, Rule 206]
3)		calciner hot-side control system	Baghouse increased particulate matter detector. [40CFR64.6.c.1]
4)	R-1	green coke feed system	Green coke feed Ohmart weigh scale and, as appropriate, green coke sulfur content and supplemental feed rate determination equipment. [40CFR64.6.c.1]
5)	R-2	calciner cold-side control system multiclone	Differential pressure indicator. [40CFR64.6.c.1]

i. At Least Once **Every Five Years**

Process	Description	Parameter
A-1	TK-800,801	Inspect the primary seal for gaps and physical condition. [District-only Rule 425.I.1]
G	TK-822,823	

j. At Least Once **Every Ten Years**

Process	Description	Parameter
A-1	TK-900,901,903	Inspect the primary seal for gaps and physical condition. [Rule 425.I.1 for Tank 903 and District-only, Rule 425.I.1 for Tanks 900 & 901]

3. Unusual Operating Condition, Actions, and Reporting.

a. AN-603 Fuel Gas Analyzer Operation

1) Any instantaneous exceedance of 160 ppmv H_2S in the fuel gas shall be reported immediately to the District, and strip charts for periods of exceedance included in the monthly report, under condition III.B.4.a. [District-only, Rule 206]

2) Any exceedance of 160 ppmv H_2S, averaged over three (3) hours, shall be included with the monthly report under condition III.B.4.a and shall include: the magnitude of emissions due to excess H_2S, conversion factors used, and date and time of commencement and completion of each time period of excess emissions. [40CFR60.105.e.3.ii]

3) Specific identification of any exceedance of 160 ppmv H_2S, averaged over three (3) hours, that occurs during start-up, shut-down, or malfunction of the gas sweetening systems shall be included with the monthly report under condition III.B.4.a and shall include the nature and cause of any malfunction and corrective action taken. [District-only, Rule 206]

4) The date and time identifying each period during which the CMS was inoperative, other than for daily calibration, and the nature of system repairs and adjustments shall be logged and reported to the APCO in accordance with the provisions of District Rules 107 and 113. A summary report of this information shall be included with the quarterly report as required in condition III.B.4.b. [40CFR60.7.b&c]

b. Failure of either the AA-601 or the AB-601 air demand analyzers, or their associated AI-601 A/B indicator instruments, shall be reported to the APCO as soon as reasonably possible but in any case within one (1) hour after the start of the next regular business day. A written report of analyzer failure shall be filed within ten (10) working days that includes the reason for failure, the corrective action taken, and the affect on plant operations. [District-only, Rule 206]

c. AN-1707/1709 Tail Gas Analyzer Operation

1) The date and time identifying each period during which the CMS was inoperative, other than for daily calibration, and the nature of system repairs and adjustments shall be logged and reported to the APCO in accordance with the provisions of District Rules 107 and 113. A summary report of this information shall be included with the quarterly report as required in condition III.B.4.b. [40CFR60.7.b&c]

2) Any exceedance of 300 ppmv TRS, averaged over twelve (12) hours, shall be included with the monthly report under condition III.B.4.a and shall include: the magnitude of emissions due to excess TRS, conversion factors used, and date and time of commencement and completion of each time period of excess emissions. [40CFR60.105.e.4.ii]

d. Flaring

1) Flaring as a result of either G-212 compressor being inoperative or flaring in excess of sixty (60) minutes cumulative in any given day, for whatever reason, shall be considered an upset under District Rule 107 and may be a violation of this condition unless relief is granted in accordance with the provisions of that rule. The written report shall include, in addition to those items required by Rule 107, the volume and heat content of the flared gas. [District-only, Rule 206]

2) All incidences of flaring less than sixty (60) minutes cumulative in any given day shall be logged and reported to the APCO in accordance with the provisions of District Rule 107 and shall also include the information required in condition III.B.3.d.1 above. These incidences of flaring are not considered a breakdown or upset condition. [District-only, Rule 206]

3) Flaring during maintenance, testing of the flare system, or turnarounds shall be logged. These incidents of flaring are not considered a breakdown or upset condition. [District-only, Rule 206]

e. With the exception of routine testing, events requiring the opening of any coke calciner hot stack cap leaf shall be logged by the shift operator and immediately reported to the District. A written explanation of such events, including start and end times, cause and resolution of occurrence, copies of strip charts indicating kiln stack temperature readings at thirty foot (30') and ninety foot (90') above the stack base, and other pertinent information, shall be submitted to the APCD within ten (10) calendar days. [District-only, Rule 206]

f. Tail Gas Unit Desalting Plant. Any failure of the tail gas unit regenerative crystallizer system which causes the release of an air contaminant shall be considered an upset under District Rule 107 and shall be a violation of this Condition unless breakdown relief is granted in accordance with the provisions of that rule. [District-only, Rule 206]

g. Any deviation from any requirement in this permit, excluding those reported under District Rule 107, Breakdown and Upset Conditions as required by condition III.A.3, shall be reported to the APCO as follows: [Rule 216.F.1.o]

1) As soon as reasonably possible, but in any case within four (4) hours, after its detection.

2) As soon as the occurrence has been corrected, but no later than ten (10) calendar days after the event, through a written report which includes the probable cause of the deviation and the corrective actions or preventative measures taken.

h. At least ten (10) working days before asbestos stripping or removal work, the APCO shall be notified as required by section 61.145.b.3.i of 40CFR61 subpart M, National Emission Standard for Asbestos. [40CFR61.145.b.3.i]

i. The repair of any component subject to 40CFR60 subparts QQQ or GGG may be postponed until the next refinery or respective process unit shutdown if that repair is technically impossible without complete or partial refinery or process unit shutdown. Additional delay of repair provisions for subpart GGG components appear in 40CFR60.482-9. [40CFR60.692-6 and 482-9]

j. Isolation of one (1) calciner cold stack baghouse module for later repair while green coke is being processed in the calciner shall be reported to the APCO within four (4) hours and shall not be considered a deviation from the requirements of II.B.24.c above. A written report describing when and why the module was isolate and when repair is anticipated shall be included in the next monthly report under condition III.B.4.a below. Isolation of more than one (1) module at a time for later repair while green coke is being processed in the calciner shall be considered a breakdown under District Rule 107. [SIP Rule 205]

4. Reporting. Each report, due on the date indicated in the following table, should include data for the respective time periods in any given year unless otherwise indicated. [SIP Rule 205]

Due Date	**Monthly Data**	**Quarterly Data**	**Semi-annual Data**	**Annual Data**
January 31	December	October 1 through December 31	July 1 through December 31	
March 1				January 1 through December 31
April 30	March	January 1 through March 31		
July 31	June	April 1 through June 30	January 1 through June 30	
October 31	September	July 1 through September 30		

a. On a calendar **monthly** basis, ConocoPhillips shall submit a report to the APCO. That report shall be submitted no later than ten (10) business days after the end of the month and shall include the following for the respective calendar month. [SIP Rule 205]

1) Daily steam records kept under condition III.B.1.d. [District-only, Rule 206]

2) Results of hydrogen sulfide and total sulfur samples drawn on the fuel gas under condition III.B.2.c.2. [SIP Rule 205]

3) Daily average AN-1707/1709 tail gas monitoring results. [SIP Rule 205]

4) Copies of records, including strip charts as identified under condition III.B.3.a.1 above, and an explanation for any unusual event that either affects the normal operation of the B-702 tail gas combustor or causes the fuel gas sulfur content to exceed an instantaneous value of 160 ppm H_2S. [District-only, Rule 206]

5) A summary of flaring that occurs as a result of maintenance, testing of the flare system, or turnarounds. [District-only, Rule 206]

6) If the gas oil loading rack is used to load or unload material: [District-only, Rule 206]
   i. the maximum daily loading rate in barrels per day,
   ii. the maximum pumping rate in gallons per minute, and
   iii. the maximum RVP of material received.

7) A list of all floating roof storage tanks which were emptied and degassed and/or whose roof was landed on its support legs. The reason for that activity for each tank and results of all inspections required by this permit shall also be included. [SIP Rule 205 for Tank 903 and District-only, Rule 206 for all other tanks]

8) Summary of the daily green coke sulfur content and total feed rate determinations, and what those values indicate about the probable cold stack particulate matter emission rate using the regression curve developed under condition III.E.24.e.2 below and the most recent filterable particulate matter emission rate determined under condition III.D.5.a below. [40CFR64.7.a&c]

9) Daily calcined coke production. [District-only, Rule 206]

10) The results of the fuel gas GHV analysis for the given month, and the average value to be used to determine compliance. If a fuel gas GHV was not determined for the given month, an explanation shall be included. [District-only, Rule 206]

b. On a **quarterly** basis, ConocoPhillips shall submit a report to the APCO, with a copy to the EPA Region IX Administrator. Each report shall be submitted no later than January 31, April 30, July 31, and October 31 of any given year, shall be certified to be true, accurate, and complete by a responsible official, and shall include the following data. [SIP Rule 205]

1) Summary information of the hydrogen sulfide concentration in the refinery fuel gas based on records maintained under condition III.B.1.b.1. [SIP Rule 205]

2) Average sulfur content of the fuel gas supplied to the B-505 boiler. [District-only, Rule 206]

3) Those dates, if applicable, in the preceding quarter when the daily oxides of sulfur emissions from the B-505 boiler exceeded 100 lbs. [District-only, Rule 206]

4) All periods that the coke calcining kiln was not in operation. [District-only, Rule 206]

5) All periods that the carbon plant waste heat boiler was not in operation. [District-only, Rule 206]

6) Report excess emissions as indicated by, or CMS downtime of, AN-603, Fuel Gas CMS, and AN-1707/1709, Tail Gas CMS, using the summary report form that appears in 40CFR60.7, Figure One (1). If the total duration of excess emissions is less than one percent (1%) and the CMS downtime is less than five percent (5%) of the total operating time, only the summary report form, with a statement that no excess emissions and/or no CMS downtime occurred, need be submitted. If the excess emissions or CMS downtime exceeds either of those times, the summary report shall be accompanied by a report that includes: [40CFR60.7.c]
   i. The magnitude of excess emissions, conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
   ii. The process operating time during the reporting period.
   iii. Whether the excess emissions occurred during start-up, shutdown, or malfunction.
   iv. The nature and cause of any malfunction, the corrective action taken, or preventive measures adopted.
   v. The date and time of CMS downtime, except for zero and span checks, and the nature of system repairs or adjustments.

c. On a **semi-annual** basis, ConocoPhillips shall submit a report to the APCO, with a copy to the EPA Region IX Administrator. Each report shall be submitted no later than January 31 and July 31 of any given year, shall be certified to be true, accurate, and complete by a responsible official, and shall include the following. [Rule 216.F.1.c.3]

1) Certification that all of the required inspections have been carried out in accordance with 40CFR60, subpart QQQ. That report shall also summarize all inspections when a water seal was dry or otherwise breached; when a drain cap or plug was missing or improperly installed; or cracks, gaps, or other problems were identified that could result in VOC emissions. [40CFR60.698.b.1 & c]

2) A fugitive emission program summary in accordance with 40CFR60, subparts GGG and VV, which contains the following. [40CFR60.487.c and, for all naphtha stream components, 40CFR63.648.a]
   i. A list of leaking components by month including those whose repaired was delayed and justification for that delay.
   ii. Process unit shutdown dates.
   iii. Revisions to the component count list.
   iv. A calculation of the percentage of valves in gas/vapor and light liquid service, which have been found to leak, in accordance with 40CFR60.483-1.c.3. [SIP Rule 205]

3) A summary of deviations from requirements in this permit. [Rule 216.F.1.c.3.i]

4) If ConocoPhillips is not in compliance with any federally-enforceable requirement, include a progress report on the schedule of compliance that has been approved by the District Hearing Board. That report shall include: [Rule 216.F.2.c]

i. dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
ii. an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

5) For each of the preceding six months, the 12-month rolling period totals for:
   i. individual fuel heat input in mmBtu for the B-2A, B-2B, B-62A, B-62B, B-102A, B-102B heaters; and [SIP Rule 205]
   ii. triethylene glycol charged to the calciner preheater system. [District-only, Rule 206]

6) The maximum hourly heat input rate, in terms of a single mmBtuh-value each, for the B-2A, B-2B, B-62A, B-62B, B-102A, and B-102B heaters. [District-only, Rule 206]

7) The maximum hourly heat input rate, on a daily average and in terms of mmBtuh, for the B-2A, B-62A, and B-102A heaters combined and for the B-2B, B-62B, and B-102B heaters combined. [District-only, Rule 206]

8) For the B-505 boiler: [District-only, Rule 206]
   i. the maximum hourly heat input rate on a daily average and in terms of a single mmBtuh-value;
   ii. for the July 31 report, the cumulative subtotal heat input for the first six months of the current calendar year, in terms of mmBtu;
   iii. for the January 31 report, the cumulative total heat input for the preceding calendar year, in terms of mmBtu/yr; and
   iv. for any period when steam is supplied to the utility plant, the start and stop time of that period and the maximum combined steam production of the carbon plant waste heat boiler, the B-504 boiler, and the B-506 boiler during that period.

9) The maximum daily crude oil feed to the refinery in barrels and, for each of the preceding six (6) months, the 12-month rolling period totals for crude oil feed. [District-only, Rule 206]

10) The maximum hourly green coke feed to the carbon plant in pounds. [District-only, Rule 206]

11) If an approved SSM plan is activated and that plan was correctly implemented, a statement to that effect. [40CFR63.10.d.5.i]

12) If an approved SSM plan is activated and the action taken is <u>not</u> consistent with that plan, a report which includes: [40CFR63.10.d.5.ii]
   i. the reasons for not following the SSM plan, and
   ii. whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

13) Summary information on the number, duration, cause, and corrective action taken of excursions, exceedances, malfunctions, and downtime of the calciner cold-side control system wet scrubber, multiclone, and, beginning September 1, 2003, its differential pressure indicator. [40CFR64.9.a.2]

14) Summary information on the number, duration, cause, and corrective action taken of excursions, exceedances, malfunctions, and downtime of the calciner hot-side control system baghouse, Ohmart scale, and, beginning September 1, 2003, increased particulate matter detector. [40CFR64.9.a.2]

d. On an **annual** basis, no later than March 1 of each year, ConocoPhillips shall submit the following.

1) A Compliance Certification Report to the APCO pursuant to District Rule 216.L.3. This report shall identify each federal applicable requirement in this permit, the compliance status of each subject process unit, whether the compliance was continuous or intermittent since the last certification, and the method(s) used to determine compliance. In addition, ConocoPhillips shall certify that the refinery is in compliance with 40CFR68, Chemical Accident Prevention Provisions. Each report shall be certified to be true, accurate, and complete by a responsible official and a copy of this portion of the annual report shall also be submitted to the EPA Region IX Administrator. [Rule 216.L.3 and 40CFR68.215.a]

2) Total Annual Benzene Quantity (TAB-Q) as required by 40CFR61.357.c. A copy of this portion of the annual report shall also be submitted to the EPA Region IX Administrator. [40CFR61.357.c]

3) Summaries of automatic and manual calibration data and internal audits of the AN-1707/1709 tail gas plant monitor. [SIP Rule 205]

4) The location and current use of the calcined coke portable handling equipment, Process S-3. A plot plan of the facility, with equipment locations indicated, shall be included. [District-only, Rule 206]

5) For any diesel engine having undergone retrofit or replacement under condition III.C.11, the actual annual fuel usage and operating hours for the respective engine. The report shall also include the engine manufacturer, model number, facility-defined equipment identification number, and a summary of the maintenance record maintained under condition III.B.1.ae above. [District-only, Rule 431.H]

6) For the ROU standby engine and each emergency water pump engine, G-515-3 and G-515-4, the total hours of emergency operation and the total hours of non-emergency operation for the preceding calendar year. [District-only, Rule 206]

e. On an **annual** basis at least ten (10) working days before the end of the calendar year, the APCO shall be notified of the predicted asbestos renovations for the following year, if the total amount of RACM is estimated to be in excess of those amounts identified in condition III.A.1.s.2. [40CFR61.145.b.3.ii]

f. For Tanks 800, 801, 822, 823, 900, 901, and 903, a report of any excessive seal gap repair action shall be made to the APCO within thirty (30) calendar days of the repair. That report shall include the date of discovery and either: the date of repair; or, in the case of a delayed repair, the date of anticipated repair and reason for delay. That report shall also include the results of a post-repair inspection for compliance. [SIP Rule 205 for Tank 903 and District-only, Rule 206, for all others]

g. For Tanks 900, 901, and 903, a report of any seal gap inspection performed under conditions III.B.2.g.1.ii & iii and III.B.2.j shall be made to the APCO within thirty (30) calendar days of the inspection. That report shall include the tank inspected, the date of the inspection, the tank and seal inspected, and a summary of the inspection results. [Rule 425.I.2 for Tank 903 and, District-only, Rule 425.I.2 for Tanks 900 & 901]

h. For Tanks 100, 101, 550, 551, 800, 801, 822, 823, 900, 901, and 903, the tank cleaning plan required under III.C.5.a.4.ii shall be submitted to the APCO for his approval no less than fifteen (15) calendar days prior to the initiation of cleaning. [District-only, Rule 206]

C. Conditions Common To More Than One Process Unit

1. Inspection and Maintenance Program for Fugitive VOC Emissions

Subject Process	Condition
A-1,A-2,B-1, B-2,B-3,C, D-1,D-2,E-1, E-2,G,H,I,J, K,L,O,P,R-1	a. Each subject process shall be inspected and maintained on a schedule that satisfies the provisions of 40CFR60, subpart GGG, Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries. Conditions III.B.2 and III.B.4 to this permit shall respectively govern the timing of periodic inspections and reporting. [40CFR60-GGG and, for all naphtha stream components, 40CFR63.648.a]
	b. A leak, as referenced in subpart GGG, detected by the APCO or his designee shall constitute a violation of this condition with the exception of those components previously identified by ConocoPhillips that are awaiting repair. [District-only, Rule 206]
	c. The percentage of valves in gas/vapor and light liquid service that leak shall not exceed two percent (2.0%). [40CFR60.483-1.d]
	d. All pressure-vacuum relief valves shall be maintained in a leak-free condition except when the operating pressure exceeds the valve pressure setting or during testing. [40CFR60.482-4] 1) Leak-free is defined as an instrument reading of less than 500 ppm above background. 2) After the lifting of any pressure-vacuum relief valve, that valve shall be returned to leak-free condition as soon as practicable, but not later than five (5) calendar days after the release, except as allowed under condition III.B.3.i. 3) No later than five (5) calendar days after the lifting of any pressure-vacuum relief valve, that valve shall be monitored to determine that it is leak-free.
	e. Each pump, which is equipped with a dual mechanical seal employing a barrier fluid system, shall: [40CFR60.482-2.d] 1) operate with the barrier fluid at a pressure that is greater than the pump stuffing box pressure; 2) employ a barrier fluid that is a heavy liquid; 3) employ a barrier fluid system which has a sensor to detect failure of the seal system, the barrier fluid system, or both and that sensor employs an audible alarm or the system is checked daily; 4) A "leak" is defined as liquid dripping from the pump seal. See condition III.B.2.a.2 above for tagging and repair requirements.

(continued)

1. Inspection and Maintenance Program. (continued)

Process	Condition
A-1,A-2,B-1, B-2,B-3,C, D-1,D-2,E-1, E-2,G,H,I,J, K,L,O,P,R-1	f. Each compressor shall be equipped with a seal system that includes a barrier fluid system, which shall: [40CFR60.482-3] 1) operate with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure, or 2) employ a barrier fluid system that is connected by a closed vent system to a control device; 3) employ a barrier fluid that is a heavy liquid; 4) employ a barrier fluid system which has a sensor to detect failure of the seal system, the barrier fluid system, or both; and 5) that sensor employs an audible alarm or the system is checked daily. 6) A "leak" is defined as a failure of the seal system or the barrier fluid system. See condition III.B.2.a.2 above for tagging and repair requirements.
	g. Each sampling system, which is not an in-situ system, shall be equipped with a closed purge, closed loop, or closed vent system, which shall: [40CFR60.482-5] 1) return the purged process fluid directly to the process line, or 2) collect and recycle the purged process fluid, or 3) capture and transport all purged process fluid to a control device.
	h. Each open ended valve or line shall: [40CFR60.482-6] 1) be equipped with a cap, blind flange, plug, or secondary valve which seals the open end at all times except during operations requiring process fluid flow through the valve or line; and 2) if a secondary valve is used, be operated in such a manner that the valve on the process fluid end is closed before the secondary valve is closed; and 3) if a double block-and-bleed system is used, be allowed to operated with the bleed valve open during operations requiring venting of the line between the block valves but shall comply with this condition III.C.1.h at all other times.
	i. Closed vent system requirements [40CFR60.482-10] 1) Vapor recovery system shall be operated to recover VOC emissions with an efficiency of ninety-five percent (95%) or greater. 2) All control devices shall be monitored to ensure that they are operated and maintained in accordance with their design specifications. 3) Closed vent systems shall be operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. 4) Closed vent systems and control devices shall be operated at all times when emissions may be vented to them.

2. Waste Water Systems.

Process	Condition
A-2,B-2,B-3, D-2,E-1,E-2, G,I,J,L,O,P	Each subject oily water sewer, installed or modified after May 4, 1987, shall be inspected and maintained on a schedule that satisfies the provisions of 40CFR60, subpart QQQ, Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems. Conditions III.B.2 and III.B.4 to this permit shall respectively govern the timing of periodic inspections and reporting. [40CFR60-QQQ] a. All process drains connected to the first downstream junction box common to a new, modified, or reconstructed individual drain system or oil-water separator are included. [40CFR60.691, definition of "individual drain system"] b. The loss of a system water seal, for whatever reason, detected by the APCO or his designee shall constitute a violation of this condition with the exception of those components previously identified by ConocoPhillips that are awaiting repair. [District-only, Rule 206]

3. Fuel Gas Combustion.

Process	Condition
B-1,C,D-1, D-2,K,O	Each subject process shall be inspected and maintained on a schedule that satisfies the provisions of 40CFR60, subpart J, Petroleum Refineries. Conditions III.B.2 and III.B.4 to this permit shall respectively govern the timing of periodic inspections and reporting. [40CFR60-J]

4. Floating Roof Tanks.

Process	Condition
A-1,G	a. Single seal tanks shall not be used to store organic liquids with a true vapor pressure of 0.5 psia or greater. [District-only, Rule 206 for Tanks 822 & 823 and District-only, Rule 425 for all others]
	b. Double seal tanks shall not be used to store organic liquids with a true vapor pressure of eleven (11) psia or greater. [SIP Rules 205 & 407.A.2]
	c. There shall be no holes, tears, or other openings in the primary seal, the secondary seal, seal fabric, or seal envelope which allow the emission of volatile organic compounds to the atmosphere, except when the storage tanks are empty and out of service. [District-only, Rule 206 for Tanks 822 & 823 and District-only, Rule 425 for all others]
	d. The secondary seal shall not extend above the top edge of the tank wall. [District-only, Rule 206 for Tanks 822 & 823 and District-only, Rule 425 for all others]

(continued)

4. Floating Roof Tanks. (continued)

Process	Condition
A-1,G	e. All roof openings, except pressure-vacuum relief valves and automatic bleeder vents, shall provide a projection of at least two inches (2") below the stored liquid surface. [District-only, Rule 206 for Tanks 822 & 823 and District-only, Rule 425 for all others]
	f. All openings and fittings shall be covered and shall have gaskets with no visible gaps. [District-only, Rule 206 for Tanks 822 & 823 and District-only, Rule 425 for all others]
	g. Any excessive seal gap shall be repaired within thirty (30) calendar days. A thirty (30) calendar day extension may be requested from the APCO if repairs cannot be completed within thirty (30) calendar days because they are technically not possible without complete or partial shutdown of the refinery. [District-only, Rule 206]
	h. Each time a storage tank is emptied and degassed, the roof fittings and primary and secondary seals shall be inspected for compliance with this permit. [SIP Rule 205&40CFR60.113b.b.6 for Tank 903 and District-only Rule 206 for all others]
	i. Each time a storage tank roof is refloated after having been on its support legs, the primary and secondary seals shall be inspected for compliance with gap criteria of this permit. If a maintenance activity involves multiple flotation cycles, a single inspection may be performed after the last cycle. [SIP Rule 205 and 40CFR60.113b.b.1.i for Tank 903]
	j. Storage tank seal inspections shall use 1/8", 1/4", 1/2", and 1-1/2"gap measuring rods, at least fifty-four inches (54") in length, constructed with a calibrated cross section in the measuring area to quantify gaps encountered. [SIP Rule 205 and 40CFR60.113b.b.2 for Tank 903] 1) The gap measuring technique shall consist of an attempt to insert a rod of a known dimension between the metallic shoe seal or the wiper seal, as appropriate, and the storage tank wall. The rod should be held vertically and inserted with a firm pressure but not with enough force to deflect the seal. If the rod can be inserted its full length without significant resistance, the gap should be considered greater than the rod diameter. If the rod will not go past the seal, or if significant resistance is encountered, the gap should be considered equal to or less than the diameter of the rod. 2) Wherever the 1/8" gap measuring rod passes the seal freely, without forcing or binding against the seal, the gap width and length shall be further evaluated sufficient to determine compliance with the requirements of condition III.E.1.a. For Tanks 822, 823, and 903, the total gap width and perimetrical distance combination shall be determined for the length of the gap such that a square inches of gap per foot of tank perimeter value may be quantified.

5. Domed and Floating Roof Tanks.

Process	Condition
A-1,G,P	a. Potential nuisances caused by excessive odor ladened vapor emissions shall be mitigated during open tank work by: [District-only, Rule 206] 1) placing materials which are contaminated with stored product, such as seal material, fabric, etc., into closed containers for handling and disposal in accordance with applicable regulations, and 2) generally maintaining clean work areas. 3) Vacuum truck pump discharge gases shall be vented to an emission control device capable of reducing volatile organic compound (VOC) emissions by ninety-five percent (95%) during all tank cleaning material removal. Fresh, activated carbon of sufficient capacity to prevent breakthrough of VOC emissions will be considered to achieve at least ninety-five percent (95%) control for the purposes of this condition. The air pollution control device shall be subject to the APCO's approval on a case-by-case basis prior to the beginning of work. 4) During tank cleaning, ConocoPhillips shall: i. adhere to the general Tank Cleaning Plans, and ii. submit a specific tank cleaning plan, which may reference the general Plans, to the APCO for any tank cleaning process that may emit nuisance odors to the atmosphere. That plan shall be submitted to the APCO at least fifteen (15) calendar days prior to cleaning and shall describe the procedures to be employed to minimize potential nuisance odors.
A-1,G	b. All gauging and sampling ports shall remain tightly closed and gas-tight except when gauging or sampling is taking place. [Rule 425.E.3.a & SIP Rule 407.A.2 for Tanks 550 & 551]
A-1,P	c. The lifting of a relief valve except during testing shall be considered an upset under District Rule 107, Breakdown or Upset Conditions and Emergency Variances, and shall be a violation of this condition unless relief is granted in accordance with the provisions of that rule. [District-only, Rule 206]
	d. The pressure regulation, alarm, and relief set-points shall be as follows. [District-only, Rule 206] 1) pressure regulation: +0.5 to +1.5 inches of water 2) audible and visual alarms: 0.0 and +2.5 inches of water 3) pressure-vacuum valve protection: +3.0 and -1.0 inches of water respectively. 4) emergency vent manhole lid protection: +4.0 inches of water.
A-1	e. Testing to determine the vapor pressure of stored materials shall be conducted as directed by the APCO. [District-only, Rule 206]

6. New Source Performance Standard General Provisions

Process	Condition
A-2,B-1, B-2,B-3,C, D-1,D-2, E-1,E-2,G, I,J,K,L,O,P	a. Each subject process shall comply with the notification, recordkeeping, and reporting requirements as specified in 40CFR60.7. All notifications and reports shall be submitted to the APCO with a copy submitted to the EPA Region IX Administrator. Such action shall include the following. [40CFR60.7] 1) Written notification of the anticipated date of any physical or operational change that may increase emissions, no less than sixty (60) calendar days prior to that date. 2) Maintaining records of the occurrence and duration of any startup, shutdown, or malfunction, except for fugitive emission components as allowed under 40CFR60.486.k. 3) Maintaining a file of all measurements and performance evaluations for a minimum of five (5) years.
	b. Each subject process shall be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. [40CFR60.11.d]

7. Fuel Gas System

Process	Condition
B-1,C, D-2,I,J	a. Provisions for extracting refinery fuel gas samples shall be provided and maintained. [SIP Rule 205 for B-62A/B heaters and process units I & J and District-only, Rule 206 for all others]
I,J	b. In the event of a breakdown or upset of either unit, ConocoPhillips shall reduce crude oil throughput to a level such that the fuel gas produced by the remaining operating H_2S absorption unit will continue to meet the limits of Condition I.B.5. [District-only, Rule 206]
	c. Specific operating conditions added as a BACT finding for the B-505 boiler, application number 1916. Except during start-up and shutdown periods: [District-only, Rule 204] 1) The concentration of Sulfolane W in the H_2S absorbers D-601A and D-601B shall be maintained at twenty percent (20%) or greater by weight. 2) The temperature of the stripper bottoms of units D-602A and D-602B shall be maintained between 250 degrees and 280 degrees F.

8. Fuel Gas Monitoring

Process	Condition
I,J	a. The instrument for continuously monitoring and recording concentrations of hydrogen sulfide in the fuel gas, AN-603, shall be maintained in accordance with the provisions of 40CFR60, subpart J. [40CFR60.105.a.4]
	b. Except for system breakdowns, repairs, calibration checks, and zero or span adjustments, the AN-603 system shall be in continuous operation. [40CFR60.13.e]
	c. In the event of a breakdown or upset of AN-603, which will last eight (8) hours or longer, a sample of the sweet gas shall be analyzed for hydrogen sulfide by the Drager tube method or other approved method. [District-only, Rule 206]

9. Visible Emissions.

Process	Description	Condition
D-1	B-504 & 506	a. Visible emissions shall not exceed Ringlemann #1 or twenty percent (20%) opacity for a period exceeding three (3) minutes aggregated in any sixty (60) minute period of time. [District-only, Rule 206]
N	blast containment structure	
R-1	hot stack	
R-3	cold stack	
V	fugitives	
R-2	fugitives	b. Visible emissions shall not exceed ten percent (10%) opacity for a period exceeding three (3) minutes aggregated in any sixty (60) minute period of time. [District-only, Rule 206]
S-1		
U (a)		
D-1	G-515-3 G-515-4	c. Visible emissions shall not exceed Ringlemann No. ¼ or five percent (5%) opacity for periods aggregating more than three (3) minutes in any hour. [District-only, Rule 206]

Note: (a) The fall of material from the pelletizer spray shall not be evaluated as visible emissions if it drops to the ground within the staging area.

10. Refinery MACT Standard. All subject processes shall comply with the provisions of 40CFR63, National Emission Standards for Hazardous Air Pollutants, subpart A, General Provisions, and subpart CC, Petroleum Refineries. [40CFR63.640.a and in addition to the references cited below, the following references shall apply to each requirement: 40CFR63.2.c.1, 63.4.a.1, 63.4.a.3, 63.4.a.5]

a. For all naphtha stream components, compliance with the requirements of 40CFR60 subpart VV shall be deemed compliance with 40CFR63 subpart CC. [40CFR63.648.a]

b. ConocoPhillips shall implement the APCO approved startup, shutdown, and malfunction (SSM) plan. [40CFR63.6.e.3]

1) During SSM periods for all naphtha stream components, ConocoPhillips shall operate and maintain the refinery in accordance with the approved SSM plan.

2) Malfunctions shall be corrected as soon as practicable after their occurrence. [40CFR63.6.e.1.ii]

3) If the SSM plan is revised, the previous version shall be retained for a minimum of five (5) years from the date of revision and shall be made available to the APCO upon request.

4) If it is found that the SSM plan fails to address a malfunction not initially included in that plan, ConocoPhillips shall submit a revised plan to the APCO for his approval within forty-five (45) calendar days of that discovery.

c. The following specific provision shall apply.

1) ConocoPhillips shall not fail to report, revise reports, or report source test results as required by 40CFR63, subpart CC. [40CFR63.4.a.2]

2) Each subject process shall be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. [40CFR63.6.e.1.i]

3) A copy of all reports submitted to the APCO pursuant to 40CFR63, subparts A and CC, shall be submitted to the EPA Region IX Administrator. [40CFR63.10.a.4.ii]

4) ConocoPhillips shall identify, either by list or location, equipment in naphtha service less than 300 hours per calendar year. [40CFR63.654.d.5]

11. Diesel Engines. An application to perform the retrofit or replacement of any of the following diesel engines shall be submitted to the APCO no later than sixty (60) calendar days prior to the performance of that work. [District-only, Rule 431.J.3]

a. cooling water circulation pump, G-51-4, item II.B.3.i; and

b. air compressor, GE-524-S, item II.B.17.

D. Compliance Testing Conditions

1. Monitoring Procedures and Records.

a. All testing shall be conducted in accordance with the District's Source Test Policy with results being reported to the APCO within forty-five (45) calendar days of testing. [District-only, Rule 210.B.1]

b. A record of compliance testing shall be maintained and shall include at least the following information. [Rule 216.F.1.c.3 for all "federally-enforceable" conditions and, District-only, Rule 206 for "District-only" enforceable conditions]

i. The date, place as defined in this permit, and time of sampling or measurements;

ii. The date(s) analyses were performed;

iii. The company or entity that performed the analyses;

iv. The analytical techniques or methods used;

v. The results of such analyses; and

vi. The operating conditions as existing at the time of sampling or measurement.

2. Annual Refinery Compliance Testing. ConocoPhillips shall contract with an independent, or other District-approved, laboratory to conduct the following tests at least once each calendar year using methods approved by the District.

Process	Condition
B-1,C, D-1,D-2	a. Determination of oxides of nitrogen (NO_x) emissions, calculated as NO_2, oxygen (O_2), carbon monoxide, and carbon dioxide from the: [SIP Rule 205 for B-506 & B-201A/B NO_x and O_2; and District-only, Rule 206 for all others] B-504 boiler, B-505 boiler, B-506 boiler, [in addition, 40CFR60.48b.g.2 for NO_x & O_2] crude heaters (B-2A/B), vacuum heaters (B-62A/B), coker heaters (B-102A/B), and steam superheaters (B-201A/B).
	b. Determination of total sulfur content of the fuel gas, including hydrogen sulfide, mercaptan, and other related fuel gas constituents, supplied to the: [SIP Rule 205] B-504 and B-506 boilers, B-505 boiler, and Coking Unit A and B process heaters.

(continued)

2. Annual Refinery Compliance Testing. (continued)

Process	Condition
B-1,C, D-1,D-2	c. Determination of the gross heating value on a dry basis of the fuel gas supplied to the coking unit heaters, the fuel gas supplied to the B-505 boiler, and the fuel gas supplied to the utility plant boilers. [District-only, Rule 210.B.1] 1) The gross heating value of the supplied fuel gas shall be determined each time a heater is tested for compliance. [District-only, Rule 206] 2) The analysis of gross heating value samples shall be expedited and the results shall be reported to the APCO separately from the complete source test report as soon as possible after the results are received by ConocoPhillips. [District-only, Rule 206] 3) Compliance with the heat input limits of this permit during emission compliance testing shall be based on the fuel gas heating value sampling and analysis conducted concurrently with that testing, rather than the average of the most recent three monthly samples as required by condition III.D.7.b below. [District-only, Rule 206]
	d. Determination of sulfur and total HAP content of crude oil feed to refinery on a single day, weight percent basis. [District-only, Rule 210.B.1 for sulfur content and SIP Rule 205 for HAP content]
	e. Determination of the hourly heat input rate to the following heaters and boiler in terms of mmBtuh: [District-only, Rule 210.B.1] B-2A/B, B-62A/B, B-102A/B, and B-505.
	f. The heat input limits in conditions I.B.3.a, b, d, e, and g above may be exceeded during APCO approved testing, but compliance with the emission limits of Condition I.A.1 through 5 shall be shown concurrently.

3. Annual Refinery Performance Audits.

Process	Condition
J,K	ConocoPhillips shall conduct or cause to be conducted a performance audit at least once each calendar year for the: [Rule 210.B.1 and 40CFR60.13.c] AN-603 fuel gas monitor, and AN-1707/1709 tail gas monitor. Such testing shall be conducted in compliance with the requirements of 40CFR60.105(a).

4. Biennial Refinery Compliance Testing.

Process	Condition
B-1,C, D-2,K	At least once every two calendar years, ConocoPhillips shall contract with an independent, or other District-approved, laboratory to conduct tests to determine the: a. sulfur dioxide emissions in 2004, 2006, and 2008 from the: [District-only, Rule 206 for B-2A/B and SIP Rule 205 for all others] crude heaters (B-2A/B), coker heaters (B-102A/B), and steam superheaters (B-201A/B); b. volatile organic compound emissions in 2004, 2006, and 2008 from the B-505 boiler; [District-only, Rule 210.B.1] c. hydrogen sulfide and reduced sulfur compounds in 2003, 2004, 2006, and 2008 in the B-702 stack gas with the combustor on low fire; [SIP Rule 205] d. sulfur dioxide emissions in 2003, 2004, 2006, and 2008 in the B-702 stack gas with the combustor on high fire; and [SIP Rule 205] e. oxygen levels for at least a three (3) calendar day period in 2003, 2004, 2006, and 2008 at the AN-1707/1709 monitor sampling point. [SIP Rule 205]

5. Annual Carbon Plant Compliance Testing.

Process	Condition
R-2,R-3	ConocoPhillips shall contract with independent, or other District-approved, laboratory to conduct the following tests at least once each calendar year using methods approved by the APCO: a. cold stack emissions of: [Rule 210.B.1 for CO, HCl, TSP, & SO_2, and 40CFR64.6.c.3 for TSP & SO_2, and, District-only, Rule 210.B.1 for NO_x] carbon monoxide, hydrochloric acid, oxides of nitrogen, particulate matter, and sulfur dioxide; b. cooler stack emissions of particulate matter; [Rule 210.B.1 and 40CFR64.6.c.3] c. sulfur content of liquid and gaseous fuels; [District-only, Rule 210.B.1] d. petroleum coke feed: [District-only, Rule 210.B.1] sulfur and percent moisture; e. coke input feed and output product rates; and [District-only, Rule 210.B.1] f. steam production rate. [District-only, Rule 210.B.1]

6. Biennial Carbon Plant Compliance Testing.

Process	Condition
S-2	During 2003, 2005, and 2007, ConocoPhillips shall contract with an independent, or other District-approved, laboratory to conduct tests to determine the rail car loading baghouse emissions of particulate matter. [Rule 210.B.1]

7. Fuel Gas Testing

a. If the refinery is operating normally, and except during months when APCO approved formal compliance testing that includes a fuel gas heating value determination is scheduled to occur, a representative sample of the fuel gas supplied to the coking unit heaters shall be drawn from a location subject to the APCO's approval between the hours of 10 a.m. and 1 p.m., except in the event that a coke drum-switch occurs during that time period in which case the sampling window shall be extended until 3 p.m. [District-only, Rule 206]

1) The sampling shall occur within the first five (5) business days of each calendar month.
2) The sample shall be analyzed for gross heating value (GHV) at 60^{o}F using ASTM D-1946/3588.
3) During any month when a formal compliance testing determination of fuel gas GHV occurs, that determination shall substitute for the normal monthly sampling.
4) As used here,
   i. formal compliance testing is intended to mean an APCO approved stack test designed to determine compliance with the NO_x emission limitations of condition I.A.1; and
   ii. drum-switch is intended to include any preheating that normally occurs prior to switching the feed stream from one coke drum to another.

b. Beginning on the first calendar day and ending at midnight of the last calendar day during months when formal compliance testing does not occur, and up until the first formal compliance testing sample is drawn in months when such testing does occur, the average of the fuel gas GHV analysis results for the most recent three monthly samples, or formal compliance testing determinations in previous months as applicable, shall be used to determine compliance with all process heater heat input limits of this permit (*e.g.*, the average GHV results for months 1, 2, & 3 shall be used for compliance in month 4). [District-only, Rule 206]

c. Beginning the next hour after a fuel gas sample starts during formal compliance testing, and during any succeeding months, the GHV determination made as part of that compliance test shall be used to determine compliance with all process heater heat input limits of this permit until such time as ConocoPhillips notifies the APCO of a new average GHV which includes the compliance testing results. Upon such notification, the reported average GHV shall be used to determine compliance with all process heater heat input limits of this permit until a new average is established as allowed in condition III.D.7.b above. [District-only, Rule 206]

d. The results of the fuel gas GHV analysis for any given month and the average value to be used to determine compliance with all process heater heat input limits of this permit shall be recorded and included in the monthly report required under condition III.B.4.a above which is due in the same month of the analysis (*e.g.*, the analysis results of a sample drawn in January are to be included in the monthly report due in January). [District-only, Rule 206]

1) If the results of a formal compliance testing determination are used in place of a normal monthly sample, the results of that determination and the average value to be

used for compliance purposes shall be reported as soon as possible after the analysis results are received by ConocoPhillips.

2) If a monthly sample is not drawn and analyzed (*e.g.*, the refinery was not operating normally or a formal compliance determination is scheduled), the reason shall be recorded and included in the monthly report.

3) All records associated with each fuel gas GHV analysis shall be maintained for a minimum of five (5) years.

8. Diesel Engines. Any engine, having undergone retrofit or replacement under condition III.C.11, shall be tested to verify compliance with the emission limitations therein at least once every 8,760 hours of engine operation, not to exceed thirty-six (36) months between verifications, and using the following test methods and procedures. This testing shall not be required for either the ROU standby engine or the emergency water pump engines, G-515-3 and G-515-4. [District-only, Rule 431.D.5&F]

a. NO_x and CO emissions, and O_2 content shall be determined by using ARB Method 100.

b. Percentage NO_x reductions shall be determined by measuring concurrently at the inlet and outlet of the emission control device. For engines not employing emission control devices, percentage NO_x reductions shall be determined by measuring the uncontrolled NO_x emissions prior to modification and comparing with NO_x emissions after engine modification.

c. Source test data point intervals shall be no greater than five (5) minutes and data points shall be averaged over fifteen (15) consecutive minutes.

9. Test Methods. The following methods shall be used for compliance testing and performance audits. Alternate methods may be used subject to the APCO's approval, except that any alternate method used to support or determine compliance with a federally-enforceable requirement must have previously been approved for inclusion into the SIP by EPA. The most recent version of the list of alternate methods published by ARB at their web-site *http://www.arb.ca.gov/fcaa/tv/tvinfo/accp_mth.htm*, which is included here as Appendix B, may be used as a guideline.

Parameters/Requirement	Method
sample and velocity traverses	EPA 1 or ARB 1
velocity and volumetric flowrate	EPA 2 or ARB 2
CO, CO_2, O_2, excess air, and molecular weight	EPA 3, ARB 3, or ARB 100
moisture content	EPA 4 or ARB 4
particulate matter	combined EPA 17/8 for kiln stack and EPA 5 (plus back half), or ARB 5, for all others
SO_x – refinery	ARB 6, 8, or 100
NO_x	EPA 7E or ARB 100

(continued)

9. Test Methods. (continued)

Parameters/Requirement	Method
visible emissions	EPA 9
visible emissions from flare	EPA 22
total reduced sulfur	EPA 15A or ARB 15A
AN-1707/1709 calib. check & relative accuracy	40CFR60.PS-5
H_2S	EPA 15 or ARB 15
AN-603 calib. check & relative accuracy	40CFR60.PS-7
H_2S in fuel gas – during AN-603 breakdown	length of stain tube [District-only]
total sulfur in fuel gas – weekly check	ARB-16A, Tutweiler option, or SC-307-91
total sulfur in fuel gas – annual check	ASTM D-5504 GC/SCD
total sulfur in crude oil	ASTM D-4294 [District-only]
total HAP in crude oil	ASTM 2892
fuel gas heat content	ASTM D-1946/3588
pH	EPA 150.1
particulate, H_2SO_4, SO_3, SO_2 – carbon plant	ARB 17/8 (combined)
HCL	ARB 421
fugitive VOC	EPA 21
total sulfur in green coke - annual check	ConocoPhillips AP.6.0
total moisture in green coke - annual check	ConocoPhillips AP.1.0

E. Conditions Specific To The Identified Process

1. Process Unit A-1, Petroleum Tank Farm

a. Floating roof storage tank seal limits
[District-only Rule 206 for Tanks 800 & 801,
District-only Rule 425 for Tanks 900 & 901, and
federally-enforceable 40CFR60 subpart Kb and Rule 425 for Tank 903]

1) The cumulative length of gaps between the tank shell and the primary seal: [40CFR60.113b.b.4 and Rule 425.G.5.a for Tank 903]
   i. exceeding one-half inch (½") shall not be more than ten percent (10%) of the tank circumference, and
   ii. exceeding one-eighth inch (1/8") shall not be more than forty percent (40%) of the tank circumference.

2) No gap between the tank shell and the primary seal shall exceed one and one-half inches (1½") and no continuous gap greater than one-eighth inch (⅛") shall exceed ten percent (10%) of the tank circumference. [40CFR60.113b.b.4 and Rule 425.G.5.a for Tank 903]

3) The gap between the primary shoe seal and tank wall shall not exceed three inches (3.0") for a welded tank at any point from the liquid surface to eighteen inches (18.0") above it. [40CFR60.113b.b.4 and Rule 425.F.7.b for Tank 903]

4) There shall be no visible or measurable gap between the tank shell and the secondary seal, excluding gaps that occur within two inches (2.0") of a vertical weld seam. No gap within two inches (2.0") of a vertical weld seam shall exceed one-half inch (½"). [40CFR60.113b.b.4 and Rule 425.G.5.b for Tank 903]

b. Tanks 900, 901, and 903 shall comply with the construction and maintenance requirements of District Rule 425, Storage of VOC.

1) Tanks 900, 901, and 903 shall utilize: [District-only, Rule 425.F]
   i. both a primary and secondary seal; [40CFR60.112b.a.2 and Rule 425.E.1 for Tank 903 and, District only, Rule 425.E.1 for Tanks 900 & 901]
   ii. a secondary seal that extends from the roof to the tank shell, is not attached to the primary seal, and is not shoe-mounted;
   iii. roof openings, except pressure-vacuum relief valves and automatic bleeder vents, which provide a projection at least two inches (2.0") below the liquid surface;
   iv. openings and fittings which are covered at all times and have gaskets with no visible gap, except when in use; [40CFR60.112b.a.2.ii and Rule 425.F.2 for Tank 903]
   v. sampling and gauging wells, and similar fixed projections through the floating roof, such as an anti-rotational pipe, which meet the requirements of District Rule 425.F.4 and F.5, except that the seals for the anti-rotation pipe for Tank 903 shall have no visible gap; [40CFR60.112b.a.2.ii and Rule 425.F.4.b for Tank 903]
   vi. emergency roof drains that drain back to the stored liquid and which utilize a slotted membrane fabric cover, or equivalent, that covers at least ninety percent (90%) of the area of the opening; and
   vii. a metallic shoe-type seal with one end of the shoe extending at least two inches (2.0") into the stored liquid and the other end extending a minimum vertical distance of twenty-four inches (24") above the liquid surface.

2) If a secondary seal is voluntarily removed by ConocoPhillips, the primary seal shall be made available for inspection at that time. ConocoPhillips shall provide notification to the APCO no less than seventy-two (72) hours prior to voluntary removal of a secondary seal. [District-only, Rule 425.G.7.c]

3) Each tank's external floating roof shall be floating on the stored liquid's surface at all times except during maintenance or repair as allowed under Rule 425.C. [District-only, Rule 425.E.1]

4) When each tank's external floating roof is resting on its leg supports, the process of filling, emptying, and refilling shall be continuous. [District-only, Rule 425.C.3.b]

2. Process Unit A-2, Tank Farm Vapor Recovery System.

a. The compressors barrier-fluid seals shall be maintained and operated to prevent leakage of the working fluids or gases to the atmosphere. [40CFR60-GGG&VV]

b. A spare compressor of equivalent capacity to compressor GB-451, with equivalent seal design, shall be permanently installed. [District-only, Rule 206]

c. The blanketing gas used for this system shall be pipeline quality natural gas fuel supplied from a California Public Utility Commission regulated company and shall contain less than one (1) gram per 100 cubic foot of sulfur compounds calculated as hydrogen sulfide. [District-only, Rule 206]

d. The vapor recovery system shall be operated as designed and to recover all VOC emissions vented to it with an efficiency of at least ninety-five percent (95%). [40CFR60.692-5.b]

3. Process Unit B-1, Coking Unit A. Chromium based water treatment chemicals shall not be used in the cooling tower system. [District-only, Rule 413.C.2]

4. Process Unit B-2, Coker Steamout System. Standing oil in water settling Tanks TK-405 and TK-406 shall be minimized at all times. [District-only, Rule 206]

5. Process Unit B-3, Gland Oil System. none

6. Process Unit C, Coking Unit B. none

7. Process Unit D-1, Boiler Plant.

a. Steam received from the carbon plant waste heat boiler shall be used on a "first on, last off" basis as a source of steam for the Refinery. [District-only, Rule 206]

b. Any changes in equipment that would increase the steam generating capacity or decrease steam generating efficiency of boilers B-504 or B-506 shall be reviewed and approved by the APCO prior to implementation of the proposed change. [District-only, Rule 206]

c. The Distributed Control System shall monitor and record the fuel flow and steam production from boilers B-504 and B-506. All monitoring and recording instruments shall be maintained in good operating order. [SIP Rule 205]

d. At least two (2) District approved sampling ports located ninety degrees (90^o) apart as well as adequate sampling access and services for operating sampling and testing equipment shall be maintained on the boiler plant exhaust stack. [District-only, Rule 206]

e. Only diesel that is approved for use in California by CARB may be used to fuel the Reverse Osmosis Unit (ROU) emergency standby generator and the emergency water pump engines. [District-only, Rule 206]

f. Emergency Water Pump Engines, G-515-3 and G-515-4 [District-only, Rule 206]

1) Within 90 days of the applicable calendar year and subject to the APCO's approval, emission offsets or mitigation must be provided for any NOx, VOC, PM10, CO, and SOx emissions resulting from engine operation, including emergency and non-emergency hours, in excess of 100 hours per calendar year per engine. Calculations shall be based on the G-515 emission limits in condition I.A.20 above.

2) Each G-515 engine shall each be equipped with a non-resettable run-hour meter.

8. Process Unit D-2, Electrical Power Generation Plant. [District-only, Rule 206]

a. A dedicated APCO approved fuel gas meter shall be maintained and operated on the boiler at all times.

b. Emission reduction credits in the following amounts were provided for this permit to operate the electrical power generation plant.

VOC	NO_x	SO_x	CO	PM10
5.22 tpy	14.78 tpy	18.25 tpy	47.0 tpy	4.11 tpy

c. Steam from the B-505 boiler shall not be used to supply steam to the utility plant, unless the combined steam production of the carbon plant waste heat boiler, B-504 boiler, and B-506 boiler is less than 170,000 lb/hr.

d. The Distributed Control System shall monitor and record the fuel flow and steam production from boiler B-505. All monitoring and recording instruments shall be maintained in good operating order.

9/10. Processes E-1 and E-2, Sulfur Recovery Units and Support Units. [District-only, Rule 206]

a. Incineration of tail gas in either B-602 incinerator which lasts more than four (4) hours will require concurrent shut down of carbon plant calcining kiln.

b. Each B-600 reaction furnace shall employ an operating optical pyrometer, for the purposes of monitoring proper combustion, and both audible and visual control room alarms, indicating either high or low temperature.

c. The AA-601 and AB-601 air demand analyzers, and their associated AI-601 A/B indicator instruments, shall be maintained in good operating condition. Components from one analyzer may not be used to repair the other analyzer except in situations where the respective sulfur plant for the off-line analyzer is also off-line.

d. The sulfur pit vents shall be routed to the B-602 incinerators except during incinerator or sulfur pit vent system maintenance or repair.

e. The sulfur pit vent system shall be maintained in a leak free condition.

11. Process Unit G, Oily Water Treatment

a. A preventative maintenance inspection program for Tanks 822 and 823 shall be performed on the schedule identified in section III.B.2 above and which includes the following elements. [District-only, Rule 206]

1) Gap width between the tank wall and primary seal, and at the roof centering device, shall not exceed 1½" at any point. Gap width between the secondary seal and the tank wall shall not exceed ½" at any point. The total gap between the primary or secondary seal and the tank wall shall not exceed 3.2 in^2/ft of tank wall perimeter or 0.32 in^2/ft of tank wall perimeter respectively. Each tank's circumference shall be considered to be 377 feet for the purposes of this condition. [District-only, Rule 206]

i. Any gap that exceeds the amount allowed above shall be repaired within thirty (30) calendar days with the exception of any gap in the secondary seal exceeding ½" which shall be repaired immediately.

ii. Adjustments and repairs made to any seal shall be noted in the inspection record.

iii. The APCO shall be notified by telephone immediately upon initiation of any repair.

2) Repairs may be delayed if they are technically impossible without complete or partial shutdown of the refinery or process unit. [District-only, Rule 206]

3) The general physical condition of the seal and any unusual physical or operational conditions shall be noted during all inspections. [District-only, Rule 206]

b. The following units shall be continuously vented to Process A-2, Tank Farm Vapor Recovery System:

1) three oil-water separators, F-821A,B,&C [SIP Rule 419.D.4.a and 40CFR60.692-3.b];

2) recovered oil surge drum, F-824 [SIP Rule 205 and 40CFR60.692-3.a]; and

3) two recycled solids tank, F-408&9, [SIP Rule 205 and 40CFR60.692-3.a].

c. Closed vent systems shall be operated and maintained in a leak free condition. [40CFR60.692-5.e.1]

1) For the purposes of this condition and compliance with 40CFR60, subpart QQQ, a leak shall be defined as an instrument reading of 500 ppm or more above background. [40CFR60.692-5.e.1]

2) A leak detected by the APCO or his designee shall constitute a violation of this condition with the exception of those components previously identified by ConocoPhillips that are awaiting repair. [40CFR60.692-5.e.1 and District-only, Rule 206]

12. Process Unit H, Gas Oil Loading Rack. [District-only, Rule 206]

a. A continuously accumulating metering device or equivalent shall be in place, calibrated, and maintained in good operating order on the truck loading and unloading lines of the shipping rack.

b. The APCO shall be notified no less than three (3) working days prior to the use of this equipment.

13. Process Unit I, Hydrogen Sulfide Absorption Unit A. none

14. Process Unit J, Hydrogen Sulfide Absorption Unit B. none

15. Process Unit K, Tail Gas Treating Unit.

a. The instrument for the continuous monitoring and recording of concentrations of total reduced sulfur in the gases discharged to the atmosphere from the tail gas unit, AN-1707/1709, shall be installed such that representative measurements of emissions or process parameters are obtained; shall be in continuous operation, except for breakdowns, repairs, calibration checks, and zero or span adjustments; and shall be operated and maintained in accordance with 40CFR60, subpart J. [40CFR60.105.a.6, 60.13.e, and 60.13.f]

b. The District approved sampling platform, electrical service, and sampling ports shall be maintained in good condition. [District-only, Rule 206]

c. Tail gas treatment unit operations that result in the use of the sulfur plant incinerator(s), for a period that exceeds four (4) hours, shall be accompanied by a concurrent shutdown of the calcining kiln. The calciner shall remain shut down for the duration of the tail gas treatment unit down-time. [District-only, Rule 206]

16. Process Unit L, Product Pump System. none

17. Process Unit M, Compressor Engine. [District-only, Rule 206]

a. The diesel engine shall be tuned so that particulate emissions are not visible, except during start-up.

b. Provisions for fuel oil sampling shall be maintained and available upon District request.

18. Process Unit N, Abrasive Blasting Equipment. none

19. Process Unit O, Hydrocarbon Relief and Recovery System.

a. The compressor's barrier-fluid seals shall be maintained to prevent leakage of the working fluids or gases to the atmosphere. [40CFR60.482-3.a]

b. A spare compressor of equivalent capacity to compressor GB-455, with equivalent seal design, shall be available in storage at the refinery unless the spare compressor is in service. [District-only, Rule 206]

c. The relief and recovery system shall be operated so as to minimize flaring. [District-only, Rule 206]

d. ConocoPhillips shall operate and maintain the flare in accordance with the manufacturer's design and the provisions of 40CFR60.18. [40CFR60.18 and 40CFR60.482-10.d]

1) There shall be no visible emission except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. [40CFR60.18.c.1]

2) A pilot flame at the flare tip shall be maintained at all times as indicated by a minimum flame sensor temperature of 350^{o} F or visible flame. [40CFR60.18.c.2 and 40CFR60.695.a.4]

3) The flare system shall be in operation at all times when emissions may be vented to it. [40CFR60.18.e]

4) The flare stack mass flow instrument shall be maintained and operated in accordance with the manufacturer's design. [District-only, Rule 206]

20. Process Unit P, Process Water System. none

21. Process Unit Q, Green Coke Handling System. [District-only, Rule 206]

a. If it is found that the emissions from the equipment or stockpiles covered by this permit are the cause of an excessive concentration of air contaminants anywhere beyond the facility's property line, corrective steps shall be taken to control the emissions.

b. ConocoPhillips will, upon notification by the APCO, provide such information and analysis as will disclose the extent and degree of contamination that the equipment or stockpiles cause or may cause in the ambient atmosphere, or at the option of the APCO provide facilities for, and allow access to, the equipment by Air Pollution Control District personnel or agents for inspection and/or emission testing.

22. Process Unit R-1, Petroleum Coke Calcining System. [District-only, Rule 206]

a. All four (4) cap leaves on the hot stack shall be kept closed while plant is in normal operation. When rapid reduction in steam production is needed, or for the purpose of testing leaf movement, one (1) cap leaf may be opened at a time.

b. The kiln shall not be operated unless its exhaust is controlled by the Hot-Side Control System.

c. The pyroscrubber combustion air fan shall only be used to supply air to the pyroscrubber burners. The fan shall not be used to supply air to the pyroscrubber chamber. The pyroscrubber inlet bustle air damper shall remain closed at all times.

23. Process Unit R-2, Coke Calcining Kiln, Cold Side Control System.

a. Compliance Assurance Monitoring (CAM) requirements.

1) Compliance with SIP Rules IV.113.1&2, which respectively limit particulate matter emissions to 0.3 gr/dscf and a process-rate dependent pound-per-hour level, shall be assured through the following. [40CFR64.6.c.1]

i. sampling the wet scrubber discharge using EPA Method 5 or equivalent on an annual basis (see III.D.5.b),
ii. beginning September 1, 2003, monitoring on a per shift basis that the differential pressure across the multiclone does not exceed 5.0 inches of water column (see III.B.2.a.5),
iii. monitoring on a per shift basis that there is a visible plume at the wet scrubber discharge stack (see III.B.2.a.3),
iv. monitoring on a per shift basis the presence of water flow to the wet scrubber system's drain (see III.B.2.a.4),
v. inspecting the control equipment for proper operation on a monthly basis (see III.B.2.d.5),
vi. calibrating the multiclone differential pressure indicator on an annual basis (see III.B.2.h.5),
vii. recording a description, cause, and corrective action taken for any excursions (see III.B.1.ah.8),
viii. training appropriate personnel in equipment instrumentation, proper operation, and repair (see III.E.23.a.7), and
ix. maintaining a list of spare parts retained on hand for routine repair of the multiclone, its differential pressure indicator, and the wet scrubber (see III.B.1.ah.10).

2) With the exception of those periods listed herein, the wet scrubber shall be in proper operation as indicated by a visible steam plume from the discharge stack, a continuous flow of water to the system drain, and total particulate emissions of no more than 0.3 gr/dscf. [40CFR64.7.a&c]

3) No later than September 1, 2003, the multiclone differential pressure indicator shall undergo calibration. Subsequent to that calibration and with the exception of those periods listed herein, the multiclone shall be in proper operation as indicated by a

pressure drop of no more than 5.0 inches of water on the differential pressure indicator. [40CFR64.7.a&c]

4) With the exception of those periods listed herein and beginning September 1, 2003, the multiclone differential pressure indicator shall be in proper operation as indicated by a consistent reading and the success of periodic calibrations. [40CFR64.7.a&c]

5) Proper operation of the multiclone, its differential pressure indicator, and the wet scrubber is not required during the following periods: [40CFR64.7.c]

   i. whenever calcined petroleum coke is not being processed in the cooler,
   ii. during monitoring malfunctions,
   iii. during repair activities associated with those malfunctions, and
   iv. during required quality assurance or control activities.

6) The calciner cold-side control system wet scrubber, multiclone, and, beginning September 1, 2003, its differential pressure indicator shall be maintained at all times, including but not limited to, maintaining necessary parts for routine repairs. [40CFR64.7.b]

7) Plant personnel shall be trained in the proper operation and repair of the multiclone, its differential pressure indicator, and the wet scrubber as part of their initial and on-going job qualification. [40CFR64.7.a&c]

8) Upon detecting an exceedance or excursion, ConocoPhillips shall restore proper operation of the calciner cold-side control system multiclone or wet scrubber as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [40CFR64.7.d.1]

9) An exceedance or excursion of the CAM limits shall be defined as: [40CFR64.6.c.2]

   i. beginning September 1, 2003, an instantaneous pressure drop across the multiclone of more than 5.0 inches of water as indicated by the differential pressure indicator,
   ii. lack of water circulating through the wet scrubber as indicated by no visible steam plume at the scrubber exhaust or lack of water flowing to the system drain, or
   iii. total particulate emissions in excess of 0.3 gr/dscf or the process-rate dependent pound-per-hour limit as indicated by annual compliance testing under condition III.D.5.b above.

10) If ConocoPhillips fails to comply with either of the emission limitations in condition I.A.17 above, and conditions III.E.23.a.2, 3, or 4 above did not indicate an exceedance or excursion during the non-compliance period while providing valid data, or compliance or performance testing document a need to modify the indicator criteria identified in the latter conditions, ConocoPhillips shall promptly notify the APCO and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. [40CFR64.7.e]

24. Process Unit R-3, Coke Calcining Kiln, Hot-Side Control System.

a. This air pollution control equipment shall be maintained in operating order and shall continuously control emissions from the petroleum coke calcining system. [District-only, Rule 206]

b. The magnesium hydroxide system shall be kept in proper operating order as indicated by an injection rate of at least 150 ml/min and shall be in use at all times when the baghouse is in operation, except during periodic or corrective maintenance periods of one hour or less. [District-only, Rule 206]

c. There shall be no fugitive visible emissions from the baghouse fines handling system. [District-only, Rule 206]

d. Steam production from the carbon plant waste heat boiler shall be monitored and recorded by the DCS. All monitoring and recording instruments shall be maintained in good operating order. [District-only, Rule 206]

e. Compliance Assurance Monitoring (CAM) requirements.

1) Compliance with SIP Rules IV.113.1&2, which respectively limit particulate matter emissions to 0.3 gr/dscf and a process-rate dependent pound-per-hour level, shall be assured through the following. [40CFR64.6.c.1]

i. sampling the cold stack discharge using EPA Methods 5 and 17/8 or equivalent on an annual basis (see III.D.5.a),
ii. quantifying the green coke feed rate to the calciner on a daily basis (see III.B.2.b.4),
iii. quantifying the green feed coke's total sulfur content on a daily basis (see III.B.2.b.5),
iv. developing a regression curve by September 1, 2003, that allows correlation of green coke sulfur content and feed rate to condensible particulate matter discharged from the cold stack (see III.E.24.e.2).
v. beginning September 1, 2003, operating an increased particulate matter detector at the discharge of the cold stack baghouse (see III.B.2.a.6),
vi. inspecting the monitoring and control equipment for proper operation on a monthly basis (see III.B.2.d.4&6),
vii. calibrating the Ohmart scale and increased particulate matter detector on an annual basis (see III.B.2.h.3&4),
viii. recording a description, cause, and corrective action taken for any excursions (see III.B.1.ai.8),
ix. training appropriate personnel in equipment instrumentation, proper operation, and repair (see III.E.24.e.8), and
x. maintaining a list of spare parts retained on hand for routine repair of the green coke feed scale, green coke sulfur analysis equipment, and the cold stack baghouse increased particulate matter detector (see III.B.1.ai.10).

2) Based on compliance test data determined under section III.D.5.a above and subject to the APCO's approval, develop by September 1, 2003, and annually update a regression curve that correlates green coke sulfur content and feed rate to condensible

particulate matter discharged from the cold stack. The currently approved version of that curve shall be considered appendix C to this permit. [40CFR64.7.a&c]

3) With the exception of those periods listed herein, the Ohmart green coke feed scale and supplemental feed rate determination equipment shall be in proper operation as indicated by a consistent response and the success of periodic calibrations. [40CFR64.7.a&c]

4) With the exception of those periods listed herein, the green coke sulfur analysis equipment shall be available for use as indicated by successful analyses and consistent results. [40CFR64.7.a&c]

5) No later than September 1, 2003, an increased particulate matter detector, subject to the APCO's approval, shall be installed at the discharge of the cold stack baghouse and calibrated in accordance with the manufacturer's instructions. Subsequent to that calibration and with the exception of those periods listed herein, the detector shall be in proper continuous operation as indicated by the manufacturer's specifications. [40CFR64.7.a&c]

6) Proper operation of the Ohmart green coke feed scale, supplemental feed rate determination equipment, green coke sulfur analysis equipment, and the cold stack baghouse increased particulate matter detector is not required during the following periods: [40CFR64.7.c]

   i. whenever green petroleum coke is not being processed in the calciner,
   ii. during monitoring malfunctions,
   iii. during repair activities associated with those malfunctions, and
   iv. during required quality assurance or control activities.

7) The Ohmart green coke feed scale, supplemental feed rate determination equipment, green coke sulfur analysis equipment, and, beginning September 1, 2003, the cold stack baghouse increased particulate matter detector shall be maintained at all times, including but not limited to, maintaining necessary parts for routine repairs. [40CFR64.7.b]

8) Plant personnel shall be trained in the proper operation and repair of the green coke feed scale, supplemental feed rate determination equipment, green coke sulfur analysis equipment, and the cold stack baghouse increased particulate matter detector as part of their initial and on-going job qualification. [40CFR64.7.a&c]

9) Upon detecting an exceedance or excursion, ConocoPhillips shall restore proper operation of the green coke feed scale, supplemental feed rate determination equipment, green coke sulfur analysis equipment, and the cold stack baghouse increased particulate matter detector as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [40CFR64.7.d.1]

10) An exceedance or excursion of the CAM limits shall be defined as: [40CFR64.6.c.2]

   i. beginning September 1, 2003, a condensible particulate emission rate in excess of normal as indicated by the regression curve that correlates green coke sulfur

content and feed rate to cold stack emissions,

ii. beginning September 1, 2003, an increase in particulate matter discharged from the baghouse as indicated by the increased particulate matter detector, or

iii. total particulate emissions in excess of 0.3 gr/dscf or the process-rate dependent pound-per-hour limit as indicated by annual compliance testing under condition III.D.5.a above.

11) If ConocoPhillips fails to comply with either of the emission limitations in conditions I.A.16.b or c above, and conditions III.E.24.a.2, 3, 4, or 5 above did not indicate an exceedance or excursion during the non-compliance period while providing valid data, or compliance or performance testing document a need to modify the indicator criteria identified in the latter conditions, ConocoPhillips shall promptly notify the APCO and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. [40CFR64.7.e]

25. Process Unit S-1, Calcined Coke Storage and Handling. [District-only, Rule 206]

a. All equipment except the by-pass bin and the reclaim hopper shall be vented to an approved air pollution control system.

b. This equipment shall be maintained in proper operating order. Ducts used to vent the coke sizing screen equipment shall have not more than ¼" of material build-up on the interior surface. ConocoPhillips shall supply access to the duct interior upon the District's request.

26. Process Unit S-2, Calcined Coke Loading Control System. none

27. Process Unit S-3, Calcined Coke Portable Handling Equipment. [District-only, Rule 206]

a. The APCO shall be notified before the calcined coke portable handling equipment is modified or removed from service.

b. This equipment shall not be used offsite without prior approval of the APCO. Any use offsite may require submittal of an application for modification or change of location.

c. All hoppers shall be fed by a front-end loader.

28. Process Unit U, Sulfur Pelletizing Plant. The staging area shall be kept free of sulfur to minimize fugitive emissions associated with vehicular traffic around the sulfur pelletizing plant. The staging area shall be defined as any area where equipment and/or trucks operate within the sulfur pelletizing plant area including the roadway to the coke plant. Stockpiles, including a ten foot (10') strip around the base, are not considered the staging area. [District-only, Rule 206]

29. Process Unit V, Product Elevator Bypass System. The bypass conveyor system shall be used only under the following conditions: [District-only, Rule 206]

a. periodically to verify front-loader product scales,

b. during upset periods of extreme high coke temperature excursion in the product cooler where coke temperature has the potential to exceed 400^{o}F,

c. during upset periods of product elevator failure, or

d. any emergency condition that could result in the shut down of the plant.

F. Future Effective Conditions. The following conditions will become effective upon completion of the respective Authorities to Construct or upon the date as indicated.

1. Green Coke Screen Replacement. Upon completion of Authority to Construct number 2108, the following shall apply:

a. The equipment description in term II.B.21.a shall be changed to read, "one (1) 8' x 16' triple deck Simplicity screen with two (2) 25 hp electric motors." [District-only, Rule 206]

b. The green coke screen shall be subject to the ten percent (10%) opacity limitation of condition III.C.9.b. [District-only, Rule 206]

2. Proposed Maximum Achievable Control Technology (MACT) Standards

a. Proposed 40CFR63, subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

1) If subpart DDDDD is promulgated prior to April 28, 2004, ConocoPhillips shall submit an initial notification to the APCO, with a copy to EPA, within 120 days of that standard's effective date. That notification shall include the following. [40CFR63.9.b.2]

i. the name and address of the Santa Maria Facility's owner of record,
ii. the Santa Maria Facility's address,
iii. an identification of the relevant standard and the required compliance date,
iv. a brief description of the nature, size, design, and method of operation of the Santa Maria Facility and identification of the emission points that are subject to the relevant standard, and
v. a statement that the Santa Maria Facility is a major source of HAPs.

2) If subpart DDDDD is not promulgated prior to April 28, 2004, ConocoPhillips shall submit by no later than that date a Part 2 application to the APCO, with a copy to EPA, in accordance with 40CFR63.53.b. [40CFR63.52.e.1]

b. Proposed 40CFR63, subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (non-Gasoline)

1) If subpart EEEE is promulgated prior to October 30, 2003, ConocoPhillips shall submit an initial notification to the APCO, with a copy to EPA, within 120 days of that standard's effective date. That notification shall include the following. [40CFR63.9.b.2]

i. the name and address of the Santa Maria Facility's owner of record,
ii. the Santa Maria Facility's address,
iii. an identification of the relevant standard and the required compliance date,
iv. a brief description of the nature, size, design, and method of operation of the Santa Maria Facility and identification of the emission points that are subject to the relevant standard, and
v. a statement that the Santa Maria Facility is a major source of HAPs.

2) If subpart EEEE is not promulgated prior to October 30, 2003, ConocoPhillips shall submit by no later than that date a Part 2 application to the APCO, with a copy to EPA, in accordance with 40CFR63.53.b. [40CFR63.52.e.1]

3. **40CFR63, subpart UUU**, National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units. Except as indicated, ConocoPhillips shall be in compliance with the following requirements no later than April 11, 2005. [40CFR63.1563.b]

a. The following emission units are subject to this standard.

i. Sulfur Recover Units A and B, process E-1. [40CFR63.1562.b.3]
ii. Sulfur Recover Unit Bypass Lines to the B-602A/B Incinerators. [40CFR63.1562.b.4]
iii. Tail Gas Unit, process K. [40CFR63.1562.b.3]

b. Sulfur Recovery Units A & B, process E-1, and Tail Gas Unit, process K

i. The emissions of total reduced sulfur (TRS) compounds from the B-702 incinerator shall not exceed 300 ppmv, calculated as SO_2@0%O_2dry. This is a separate requirement from condition I.A.14.c. [40CFR63.1568.a.1.ii, 63.1568.c.1, and subpart UUU, table 29, item 3]

ii. Maintain the B-702 daily average combustion zone temperature and the daily average oxygen concentration in the vent stream above the values that were established during the most recent performance test as being necessary to ensure compliance with III.F.3.b.i above. [40CFR63.1568.a.2, 63.1568.c.2, and subpart UUU, table 30, item 3]

iii. Operate and maintain the AN-1707/1709 instrument in accordance condition III.E.15.a and related provisions of this permit. [40CFR63.1568.b.1, 63.1572.b.1, and subpart UUU, table 31, item 3]

c. Sulfur Recover Unit Bypass Lines to the B-602A/B Incinerators

i. The bypass lines for Sulfur Recovery Units A and B must be vented to their respective B-602 incinerator. [40CFR63.1569.a.1.iv]

ii. Whenever either Sulfur Recovery Plant is vented through its bypass line to its respective B-602 incinerator, the following shall apply to that incinerator,

(a) The emissions of TRS compounds from the B-602 incinerators shall not exceed 300 ppmv, calculated as SO2@0%O2dry. [40CFR63.1568.a.1.ii, 63.1569.c.1, and subpart UUU, table 29, item 3, and table 36, item 4]

(b) Install, operate, and maintain parametric monitoring to measure and record the combustion zone temperature and exhaust gas oxygen content for each B-602 incinerator exhaust in accordance with 40CFR63.1572.c and subpart UUU, table 41. [40CFR63.1568.c.2, 63.1569.b.1, and 63.1572.c.1]

(c) Continuously operate all parametric monitoring, except for monitor malfunctions, associated repairs, and required quality assurance or control activities. [40CFR63.1572.d.1]

(d) Maintain the B-602 daily average combustion zone temperature and the daily average oxygen concentration in the vent stream above the values that were established during the most recent performance test as being necessary to ensure compliance with III.F.3.c.ii.a. [40CFR63.1568.a.2 and subpart UUU, table 30, item 3]

d. No later than September 8, 2005, conduct performance tests of the B-602A/B parametric monitoring systems. [40CFR63.1568.b.2,5,&6 and 63.1571.a]

   i. Establish the operating limits necessary to ensure compliance with condition III.F.3.c.ii.a above and subpart UUU, table 33, item 3, as required by 40CFR63.1568.b.5 and subpart UUU, table 30, item 3, and table 32, item 2. [40CFR63.1568.b.3]

   ii. At least 60 days prior to the test date, submit a site-specific test plan to the APCO for his approval in accordance with 40CFR63.7.c.2.i. [40CFR63.7.c.2.i]

   iii. At least 30 calendar days prior to the tests, notify the APCO of the test date. [40CFR63.1574.a.2]

   iv. Conduct the tests in accordance with 40CFR63.7&8. [40CFR63.1571.b]

e. No later than September 8, 2005, submit a notification of compliance status in accordance with 40CFR63.9.h.2, 63.1574.f, and subpart UUU, tables 33,38,&42, that includes at least the following information: [40CFR63.1568.b.7, 63.1569.b.2, 63.1571.a, 63.1574.a.3, and 63.1574.d]

   i. identification of each emission limitation,
   ii. results of the B-602A/B parametric monitoring performance tests, [40CFR63.1574.a.3.ii]
   iii. certification of performance tests already performed to demonstrate initial compliance with 40CFR60, subpart J, for the Tail Gas Unit,
   iv. certification that the B-602 A/B and B-702 incinerators meet the applicable emission limit,
   v. certification that the AN-1707/1709 emission monitoring system and B-602A/B parametric monitoring systems meet the applicable performance specification,
   vi. identification of the operating limit for each affected source, including supporting documentation,

vii. certification of compliance with 40CFR60, subpart J, emission limitations and performance specifications, and
viii. certification that the respective bypass line for each Sulfur Recovery Plant is vented to a B-602 incinerator when in operation. [subpart UUU, table 38, item 4]

f. Submit an operation, maintenance, and monitoring plan in accordance with 40CFR63.1574.f for the APCO's approval and operate at all times according to the procedures in the approved plan. [40CFR63.1568.a.3, 63.1569.a.3, and 63.1574.f]

g. ConocoPhillips shall maintain the following records in a form suitable and readily available for expeditious review. [40CFR63.1576.a&g and 63.10.b.1]

i. The following information during startup, shutdown, and malfunction (SSM) periods. [40CFR63.10.b.2 and 63.1576.a.2]

(a) The occurrence and duration of each SSM of process equipment and of air pollution control equipment.
(b) Actions taken which are different from those in the approved SSM plan, or
(c) Sufficient information to demonstrate that the actions taken were in accordance with the SSM plan.

ii. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any initial notification or Notification of Compliance Status submitted. [40CFR63.10.b.2.xiv and 63.1576.a.1].

iii. Records of performance tests, performance evaluations, and opacity and visible emission observations. [40CFR63.10.b.2.viii and 63.1576.a.3]

iv. The following information for the AN-1707/1709 continuous emission monitoring system. [40CFR63.1576.b]

(a) Records described in §63.10.b.2.vi through xi.
(b) Previous versions of the performance evaluation plan as required in §63.8(d)(3).
(c) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

v. The following information to ensure continuous compliance. [40CFR63.1576.d]

(a) Hourly average TRS monitoring data in accordance with 40CF63.1572.a for the AN-1707/1709. [40CFR63, subpart UUU, table 34, item 3]
(b) Hourly and daily average temperature and oxygen monitoring data in accordance with 40CFR63.1572.c for the B-602A/B parametric monitoring systems. [40CFR63, subpart UUU, table 35, item 3]
(c) The time and duration of any bypass from the Sulfur Recover Plants to the B-602A/B incinerators. [40CFR63, subpart UUU, table 39, item 5]

vi. A copy of the current operation, maintenance, and monitoring plan and records to show continuous compliance with the procedures in that plan. [40CFR63.1576.e]

vii. A record of any changes that affect emission control requirements. [40CFR63. 1576.f]

viii. Until the notification of compliance status required under condition III.F.3.e above is submitted, a log detailing the operation and maintenance of subject processes and emission control equipment. [40CFR63.1570.c]

h. In coordination with condition III.B.4.c above, submit semiannual compliance reports in accordance with 40CFR63.1575.c and subpart UUU, table 43, item 1. [40CFR63.1575.a,b,&c]

i. If there were no deviations from any emission limitation or work practice standard, include a statement that there were no deviations from the emission limitations or work practice standards during the reporting period and that no continuous emission monitoring system was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted. [40CFR63.1575.c.4]

ii. Deviations from emission limitations and work practice standards shall be reported in accordance with 40CFR63.1575.d&e. [40CFR63.1570.f and 63.1575.d&e.]

iii. Include a copy of any performance test done during the reporting period on any affected unit. [40CFR63.1575.f.1]

iv. If actions taken during a startup, shutdown, or malfunction were not consistent with the approved SSMP, include a description of those events and the response taken. [40CFR63.1575.h.2]

i. Develop and implement an APCO approved startup, shutdown, and malfunction (SSM) plan for subject equipment. [40CFR63.6.e.3 and 63.1570.d]

i. During SSM periods, ConocoPhillips shall operate and maintain the refinery in accordance with the approved SSM plan. [40CFR63.6.e.3.ii and 63.1570.e]

ii. Malfunctions shall be corrected as soon as practicable after their occurrence. [40CFR63.6.e.1.ii]

iii. If the SSM plan is revised, the previous version shall be retained for a minimum of five (5) years from the date of revision and shall be made available to the APCO upon request. [40CFR63.6.e.3.v]

iv. If it is found that the SSM plan fails to address a malfunction not initially included in that plan, ConocoPhillips shall submit a revised plan to the APCO for his approval within forty-five (45) calendar days of that discovery. [40CFR63.6.e.3.viii]

j. Except during SSM periods, ConocoPhillips shall be in compliance with all subpart UUU emission standards. [40CFR63.6.f.1 and 63.1570.a]

k. ConocoPhillips shall not fail to report, revise reports, or report source test results as required by 40CFR63, subpart UUU. [40CFR63.4.a.2]

l. Each subject process shall be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. [40CFR63.6.e.1.i and 63.1570.c]

m. A copy of all reports submitted to the APCO pursuant to 40CFR63, subparts A and UUU, shall be submitted to the EPA Region IX Administrator. [40CFR63.10.a.4.ii]

G. Permit Shield. The following federally-enforceable limits are subsumed by the conditions of this permit. The subsumed limit is listed first and then the permit condition(s) subsuming that limit is listed in [square brackets]. Violation of a streamlined limit, *i.e.,* those in [square brackets], may also trigger enforcement action against a subsumed emission limit to the extent that a violation of that emission limit is documented. Through this action, streamlined requirements that were previously District-only requirements become federally-enforceable if any subsumed requirement is federally-enforceable. All monitoring, recordkeeping, and reporting requirements that are associated with any subsumed requirement are also subsumed and shall not apply except as identified elsewhere in this permit.

1. The following storage tank requirements are subsumed and shall not apply.

   a. For Tanks 550 and 551, process A-1, the SIP Rule 407.A.2 requirement for a vapor recovery system and that all gauging and sampling ports be maintained gas-tight. [conditions II.B.1.d and III.C.5.b]

   b. For Tank 903, process A-1,

      1) the 40CFR60.113b.b.4 primary and secondary seal gap requirements, [condition III.E.1.a.1]

      2) the 40CFR60.112b.a.2 requirement for floating roof with double seals, [condition III.E.1.b.1.i]

      3) the 40CFR60.113b.b.1.i and 113b.b.6 seal inspection requirements, and [conditions III.C.4.i & h respectively]

      4) the 40CFR60113b.b.2 inspection technique requirements. [condition III.C.4.j]

2. The 40CFR60.104.a.2.i requirement that the tail gas unit, process K, sulfur dioxide emissions not exceed 250 ppmv (dry) corrected to zero percent (0%) O2 is subsumed and shall not apply. [condition I.A.13]

3. The 40CFR60.44b.a.1.ii requirement that the B-506 boiler NOx emissions not exceed 0.2 lb/mmBtu is subsumed and shall not apply. [condition I.A.1]

4. The 40CFR60.48b.g.2 requirement for a predictive NO_x program, with the exception of the hourly fuel usage monitoring of 60.49b.c.3, is subsumed and shall not apply. [conditions III.B.1.c, III.B.1.d, III.B.2.h, & III.D.2]

5. The SIP Rule 114.1.a requirement limiting cold stack SO_2 emissions to 2000 ppmv is subsumed and shall not apply to that emission point. [condition I.A.16.a]

H. Alternative Operating Scenarios. ConocoPhillips is allowed to operate under the alternative scenario(s) listed below and must maintain a record of all changes in operating scenarios. An Authority to Construct pursuant to District Rule 202 may be required for any given alternative scenario. [Rule 216.G.2]

1. Tank Farm Vapor Recovery Temporary Flare System. During common turnarounds when both refinery process lines A and B are shutdown and undergoing maintenance, a temporary flare system may be used to incinerate off-gas from the tank farm vapor recovery system, Process A-2.

a. Temporary flare system equipment description:

1) packed tower caustic scrubber, 30-300 mscfd capacity
2) flared gas H_2S analyzer, AE-457
3) smokeless flare, 3 inch diameter, 1000 scfm, natural gas continuous pilot.

b. Conditions specific to the temporary flare system:

1) The temporary flare shall not be used to incinerate gas with a H_2S content greater than 0.10 gr/dscf (160 ppmv), three-hour average and as measured by the AE-457 H_2S analyzer; or with a total sulfur content greater than 0.50 gr/dscf (797 ppmv), as measured by the Tutweiler test. [40CFR60.104.a.1 and SIP Rule 404.e.1]

2) The AE-457 instrument for continuously monitoring and recording concentrations of hydrogen sulfide in the flare gas shall be installed such that representative measurements of emissions or process parameters are obtained and shall be maintained in accordance with the provisions of 40CFR60, subpart J. Except for system breakdowns, repairs, calibration checks, and zero or span adjustments, the AE-457 system shall be in continuous operation. [40CFR60.105.a.4, 60.13.e, and 60.13.f]

3) The AE-457 H_2S analyzer shall meet the following specifications.

i. span, 425 mg/dscm H_2S [40CFR60.105.a.4.i]
ii. calibration drift, $\leq$21 ppm [40CFR60.PS-7.6.2]
iii. relative accuracy - If the average emissions during testing are less than 50% of the emission standard, the applicable emission standard value shall be used in the denominator of the RA equation 2-6 from 40CFR60.PS-2, as it appeared in the federal regulations as published on July 1, 2001, and the RA shall be no greater than 10%. If the average emissions during testing are greater than or equal to 50% of the emission standard, the average reference method value shall be used in the denominator of the equation and the RA shall be no greater than 20%. [40CFR60.PS-2.13.2 & 7.6.3]

4) The AE-457 H_2S analyzer shall be calibrated daily in accordance with 40CFR60.PS-7. [40CFR60.13.d.1]

5) On a weekly basis, the flared gas shall be sampled for hydrogen sulfide by using the drager tube method and total sulfur content using ARB-16A, Tutweiler option. [SIP

Rule 205 and SIP Rule 404.E.1]

6) ConocoPhillips shall conduct or cause to be conducted a performance audit at least once during each operational period of the temporary flare system for the AE-457 flared gas monitor. Such testing shall be conducted in compliance with the requirements of 40CFR60 subpart 60.105(a) and the most recent version of the District's source test policy. [40CFR60.13.c and District-only Rule 210.B.1]

7) AE-457 Unusual Operating Condition, Actions, and Reporting

   i. Any instantaneous exceedance of 160 ppmv H_2S in the fuel gas shall be reported immediately to the District, and strip charts for periods of exceedance included in the monthly report under condition III.H.1.b.9.i below. [District-only, Rule 206]

   ii. Any exceedance of 160 ppmv H_2S, averaged over three (3) hours, shall be included with the monthly report under condition III.H.1.b.9.i below and shall include: the magnitude of emissions due to excess H_2S, conversion factors used, and date and time of commencement, and completion of each time period of excess emissions. [40CFR60.105.e.3.ii]

   iii. Specific identification of any exceedance of 160 ppmv H_2S, averaged over three (3) hours, that occurs during start-up, shut-down, or malfunction of the caustic scrubber shall be included with the monthly report under condition III.H.1.b.9.i below and shall include the nature and cause of any malfunction and corrective action taken. [District-only, Rule 206]

   iv. The date and time identifying each period during which AE-457 was inoperative, other than for daily calibration, and the nature of system repairs and adjustments shall be logged and reported to the APCO in accordance with the provisions of District Rules 107 and 113. A summary report of this information shall be included with the monthly report as required under condition III.H.1.b.9.i below. [40CFR60.7.b&c]

8) The following records for the AE-457 H_2S analyzer shall maintained, then retained for a minimum of five (5) years, and be made available to the APCO upon request. [Rule 216.F.1]

   i. any measurement made; [40CFR60.105.a.4]

   ii. relative accuracy tests performed in accordance with EPA Method 15; [SIP Rule 205]

   iii. calibration drift test results as required by 40CFR60.PS-7; [40CFR60.PS-7.6.2]

   iv. daily records of the calibration including the date, zero and span values, and calibration drift; [40CFR60.13.d.1]

   v. records of all maintenance: [SIP Rule 205]

(a) date, place, and time of maintenance activity;

(b) operating conditions at the time of maintenance activity;

(c) date, place, name of company or entity that performed the maintenance activity and the methods used; and

(d) results of the maintenance; and

vi. all data sufficient to report excess emissions and continuous monitoring system (CMS) downtime as required by 40CFR60.105.e.3.ii and 40CFR60.7.c. [SIP Rule 205]

9) All reporting associated with data gathered from the AN-603 analyzer shall apply to the AE-457 analyzer while the temporary flare is in use. A clear distinction shall be drawn in that reporting as to which instrument any given data applies.

i. On a calendar monthly basis, ConocoPhillips shall submit a report to the APCO. That report shall be submitted no later than ten (10) business days after the end of the month and shall include copies of records, including strip charts as identified under condition III.H.1.b.8 above, and an explanation for any unusual event that causes the flared gas sulfur content to exceed an instantaneous value of 160 ppm H_2S. [District-only, Rule 206]

ii. On a quarterly basis, ConocoPhillips shall submit a report to the APCO, with a copy to the EPA Region IX Administrator. Each report shall be certified to be true, accurate, and complete by a responsible official, and shall include the following data.

(a) Summary information of the hydrogen sulfide concentration in the flared gas based on records maintained under condition III.H.1.b.8. [SIP Rule 205]

(b) Report excess emissions as indicated by, or downtime of, the AE-457 using the summary report form that appears in 40CFR60.7, Figure One (1). If the total duration of excess emissions is less than one percent (1%) and the AE-457 downtime is less than five percent (5%) of the total operating time, only the summary report form, with a statement that no excess emissions and/or no CMS downtime occurred, need be submitted. If the excess emissions or CMS downtime exceeds either of those times, the summary report shall be accompanied by a report that includes: [40CFR60.7.c]

(1) The magnitude of excess emissions, conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

(2) The process operating time during the reporting period.

(3) whether the excess emissions occurred during start-up, shutdown, or malfunction.

(4) The nature and cause of any malfunction, the corrective action taken, or preventive measures adopted.

(5) The date and time of CMS downtime, except for zero and span checks, and the nature of system repairs or adjustments.

10) Action must be taken to comply with the notification, recordkeeping, and reporting requirements as specified in 40CFR60.7. All notifications and reports shall be submitted to the APCO with a copy submitted to the EPA Region IX Administrator. Such action shall include: [40CFR60.7]

i. Written notification, of the anticipated date of any physical or operational change that may increase emissions, no less than 60 days prior to that date.

ii. Written notification, of the date upon which demonstration of the continuous monitoring system performance commences, no less than 30 days prior to that date.

iii. Maintaining records of the occurrence and duration of any startup, shutdown, or malfunction; and any periods when AE-457 is inoperative.

iv. Submitting a summary report on a semiannual basis, if the AE-457 is in operation more than 6 months, and upon the end of the temporary flare's operation in accordance with 40CFR60.7(c) and (d).

IV. Compliance Determination Fees. The following fee schedules shall apply to the indicated process units. [Rule 216.F.1.k]

PROCESS		FEE SCHEDULE (Rule 302.E)		EACH
A-1	Tank Farm, TK-100, 101, 550, & 551	19	fixed roof tank (domed)	4
	TK-800, 801, 900, 901, & 903	20	floating roof tank	5
A-2	Tank Farm Vapor Recovery	44	refining process unit	1
	Temporary Flare (when used)	31	miscellaneous	1
B-1	Coking Unit A	43	refining production line	1
	refinery in general	1	air monitoring oversight	1
	B-201A	3a	small process heater	1
	B-62A	3b	medium process heater	1
	B-2A & B-102A	3c	large process heater	2
	atm distillation, vacuum distillation, & coking sections	44	refining process unit	3
B-2	Coker Steamout	44	refining process unit	1
	TK-405 & 406	20	open top tank	2
B-3	Gland Oil	31	miscellaneous	1
	TK-500	19	fixed roof tank	1
C	Coking Unit B	43	refining production line	1
	B-201B	3a	small process heater	1
	B-62B	3b	medium process heater	1
	B-2B & B-102B	3c	large process heater	2
	atm distillation, vacuum distillation, & coking sections	44	refining process unit	3
D-1	Main Boiler Plant, B-504 and 506	3c	large boiler	2
	emergency water pump engine, G-515-3	27b	IC engine, additional	1
	emergency water pump engine, G-515-4	27b	IC engine, additional	1
D-2	Electrical Power Generation Plant	3c	large boiler	1
E	Sulfur Units A & B	42	sulfur recovery unit	2
G	Oily Water Treatment	38	oily water treatment	1
	F-408, 409, & 824	19	fixed roof tank	3
	TK-822 & 823	20	floating roof tank	2
H	Gas Oil Loading Rack	41	loading rack	1
	TK-802	19	fixed roof tank	1
I	Hydrogen Sulfide Absorption Unit A	42	sulfur recovery unit	1
J	Hydrogen Sulfide Absorption Unit B	42	sulfur recovery unit	1
K	Tail Gas Unit	42	sulfur recovery unit	1
L	Product Pumps	31	miscellaneous	1
M	Compressor Engine	27a	IC engine – first	1
N	Abrasive Blasting	49	sandblasting	1
O	Hydrocarbon Relief and Recovery	44	refining process unit	1

(continued)

IV. Compliance Determination Fees. (continued)

PROCESS		FEE SCHEDULE (Rule 302.E)		EACH
P	Process Water System	44	refining process unit	1
	process water tank, TK-351	19	fixed roof tank (domed)	1
Q	Green Coke Handling	47c	large screening unit	1
	asphalt emulsion system	31	miscellaneous	1
R-1	Petroleum Coke Calcining	40	coke calcining	1
R-2	Calcining Kiln, Cold-Side Control	31	miscellaneous	1
R-3	Calcining Kiln, Hot-Side Control	31	miscellaneous	1
S-1	Calcined Coke Storage and Handling	47c	large screening unit	1
S-2	Calcined Coke Loading Control	31	miscellaneous	1
S-3	Calcined Coke Portable Handling	31	miscellaneous	1
U	Sulfur Pelletizing Plant	31	miscellaneous	1
V	Product Elevator Bypass System	31	miscellaneous	1

ConocoPhillips, Santa Maria Facility, 44-23

Appendix A - Carbon Plant SO_2 Compliance Plan

Dated: April 96
Referenced in Condition: I.A.16

ConocoPhillips, Santa Maria Facility, 44-23

Appendix B - Approved Alternative Testing Methods

Dated: January 2003
Referenced in Condition: III.D.9

ConocoPhillips, Santa Maria Facility, 44-23

Appendix C - Calciner Particulate Emission Regression Curve

Referenced in Condition: III.E.24.e.2

[not yet available as of April 9, 2003]